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ABSTRACT

Goals and priorities of the University of Nevada System for 1987-1991 are presented, with attention to growth projections, campus academic and budget priorities, capital construction needs, economic development, strengthening higher education in the state, and data collection. In addition to the System's goals, academic priorities are described for the two universities, the four community colleges, and the Desert Research Institute. Ways that the University of Nevada System can help promote statewide economic diversification and development are addressed, including partnerships with business/industry and occupational and technical training in response to community and business needs. The System's 1987-1991 biennial budget request and budget priorities for the community colleges, universities, and Desert Research Institute are also considered. Ways to strengthen higher education are covered, including: university entrance standards, the Regents' Scholar Program, tuition reciprocal agreements, program review, developmental education, academic computing and new technology, and improved information for planning. Data are provided on system demographics, enrollments, and degrees awarded. (SW)

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THE UNIVERSITY OF NEVADA SYSTEM PLANNING REPORT 1987-1991

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UNIVERSITY OF NEVADA SYSTEM PLANNING REPORT: 1987-1991

Future Directions for Nevada's Colleges and Universities

January 1987

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Office of Academic Affairs
Dr. Warren H. Fox, Vice Chancellor

University of Nevada System

1987

CHAPTER ONE

HIGHER EDUCATION IN NEVADA

This report on higher education in Nevada is part of a continuous process of planning within the University of Nevada System. In 1983, Nevada 2000: Future Directions for Nevada's Colleges and Universities was published, which discusses public higher education in the state through the end of the twentieth century. Goals of the System, changing student demands, increased population, financial issues, future academic programs, and guidelines for planning were included in that report. The present planning document represents University of Nevada System recommendations for public higher education in Nevada for the four year period 1987-1991. This report contains what the Board of Regents considers to be major higher education issues in Nevada; attaining needed fiscal support, responding to increases in student enrollment, providing quality education, participating in Nevada's economic development, and continuing the provision of high quality teaching, training, research, and public service. It also contains campus information on academic priorities and programmatic trends, capital construction needs, budget priorities, and general comments about campus objectives and institutional goals.

Priorities for System components were identified in Nevada 2000 and the following statements are adapted from that report.

Community Colleges: To provide comprehensive community college educational services which include occupational education and continuing education to any citizen of the state who desires to enroll.

University of Nevada-Reno: To provide, as a land grant university, comprehensive baccalaureate and graduate programs in the liberal arts and sciences, mining, agriculture, medicine, and the professions.

University of Nevada, Las Vegas: To provide comprehensive baccalaureate and graduate programs in liberal arts and sciences, the social sciences, sciences, humanities, and professional areas such as business education, hotel administration, computer science, and engineering.

Desert Research Institute: To foster and conduct fundamental and applied scientific research, and to attract research funds and contracts from government and industry.

Office of the Chancellor: To provide leadership in higher education, academic program coordination and planning for the System, and informational, computing, and budgetary support for the System and its campuses.

To accomplish these priorities, the Board of Regents sets statewide policy, and coordinates through the Office of the Chancellor, Systemwide and institutional objectives in the implementation of programs. The System office and the campuses within the University of Nevada System regularly engage in

planning activities and in the review of current programs. On a biennial basis, a Systemwide planning report is published which reflects the planning efforts of System institutions and which provides a statewide overview of public higher education in Nevada. These planning reports serve as regular updates of the System planning document Nevada 2000.

The Challenge

The University of Nevada System will experience growth over the planning period 1987-1991. At the present time, 50,000 students are enrolled in our community colleges and universities. By the year 1991, this will total over 60,000 and by the year 2000, enrollment will total well over 70,000. By the year 2000, the number of high school graduates in the state of Nevada is predicted to increase nearly 50% and most of these students intend to go on for postsecondary education either at the community colleges or the universities. This is one the highest predictions for growth in the west.

The demands for the state of Nevada to support public education at all levels, from primary and secondary education to the community colleges and the universities, will be high.

The challenge facing the state and facing public education in Nevada will be to maintain a superior quality system of colleges and universities and to provide student access to these programs, in light of significant growth and increasing demands on state fiscal resources.

Over the last five years, enrollment within the University of Nevada System was up 21%, total degrees awarded Systemwide were up 29%, and FTE enrollment has reached an all time high of 22,781. It is incumbent upon the Board of Regents and the campuses of the University of Nevada System to offer training, educational, and research programs desired by Nevada's students, but to also balance demand against academic quality, in order to maintain programs of distinction on our campuses. The Board of Regents will implement in 1987 throughout the University of Nevada System, on a regular basis, a process of review of existing programs of instruction and an improved system of review of proposals for new programs, in order to assure the most appropriate allocation of resources within the System.

Need for Enhanced and Stable Funding

An important goal of the Board of Regents and the University of Nevada System is to identify alternate means of funding to support higher education in its pursuit of its educational goals for the state. There is a need to focus on the process used to secure steady and adequate funding to achieve quality for all of higher education in Nevada.

During the 1985 session of the Nevada State Legislature, it was determined that a review of funding formulas was appropriate and legislation authorized such a study. The purpose of studying state formulas for the support of higher education in Nevada is based on the failure of the current formula to adequately address

areas of funding other than instruction. There is a clear and demonstrated need for the enhancement of funding formulas to provide for a wider base funding for all areas of higher education.

State support is, of course, the critical area of fiscal resources for higher education in Nevada. Private support and other revenues have increased as well, but to meet the challenge of significant growth, appropriate stable state support is needed.

Economic Development

It is recommended in Nevada's state plan for economic diversification and development, that "quality education is a leading factor in Nevada's economic diversification potential. Educational excellence must begin in grade school and continue through the University System. A private/public partnership in education will yield persuasive benefits. Business and industry depend on education for long-term provision of competitive advantages including a skilled work force, research services, and lifetime learning opportunities." The attainment of educational excellence, as the plan notes, "requires an executive and legislative budgetary commitment, comparable to surrounding states."

The plan, in considerable detail, points out additional objectives, such as the recruitment and retention of outstanding faculty, specific programs in product development and research,

raising funding levels, improving continuing education, lowering the student/faculty ratio, and implementing "quick-start" programs.

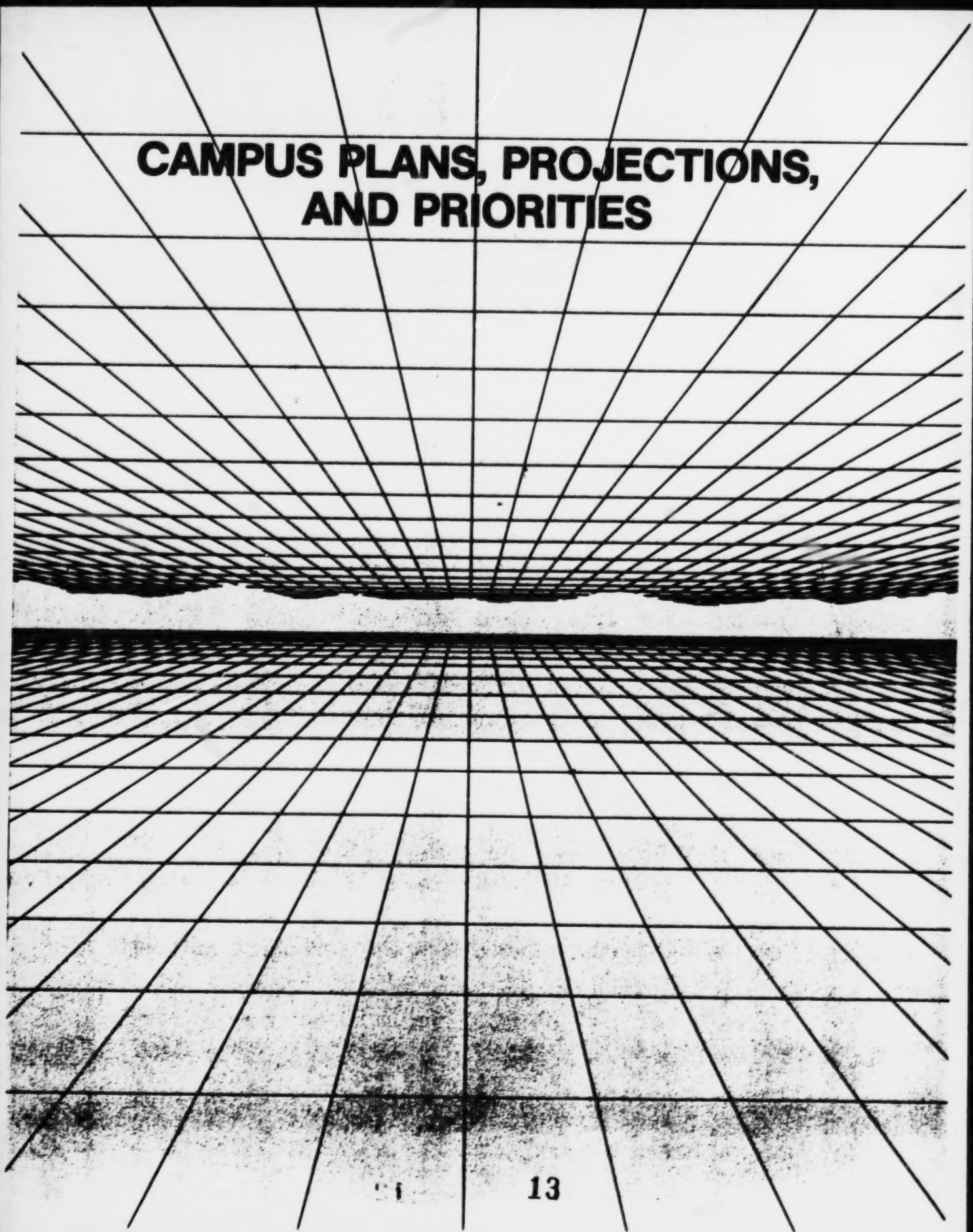
The University of Nevada System, in partnership with government and private industry, is an integral part of state plans for economic diversification and economic development. Benefits of high quality postsecondary education will not only accrue to the state, but to individuals as well who wish to expand their knowledge, improve their skills, and achieve personal development. The economy of the United States is now a knowledge and information based industry, and to be competitive in the international marketplace, our citizens and our economy are dependent upon relevant and high quality educational programs.

This report contains a separate chapter on economic development and a description of the University of Nevada System's participation as a partner in progress for Nevada.

. . .

The future is both challenging and demanding for the colleges and universities of Nevada as they respond to the challenges of growth, rapid change, diversification, and academic improvement. The campuses of the University of Nevada System will serve the state well as a valuable resource to prepare students to be productive and educated citizens, and to contribute to the economic and cultural growth of the state of Nevada.

CAMPUS PLANS, PROJECTIONS, AND PRIORITIES



CHAPTER TWO

CAMPUS PLANS, PROJECTIONS, AND PRIORITIES

Long range goals for the University of Nevada System are identified in the planning report Nevada 2000: Future Directions for Nevada's Colleges and Universities. Each institution constantly reviews and updates its planning statements, as well as maintaining a continual commitment to pursuing excellence in teaching, research, and public service.

Through recent actions, the Board of Regents has adopted new entrance standards for the universities, developed a core curriculum of general education courses which is now required of all students who receive an associate of arts or baccalaureate degree, established a statewide scholarship program as a means to retain outstanding students in the state, as well as other policies described in this planning report. The Board of Regents has demonstrated through the establishment of these programs a strong commitment to the fundamentals of undergraduate education.

The institutions within the University of Nevada System offer a full range of academic programs to serve students who are highly diverse in age, background, experience, and preparation. Each campus has identified trends and future directions designed to meet educational and research needs in Nevada.

System goals and academic priorities for the two universities, the four community colleges, and the Desert Research Institute, are described below.

The goals of the University of Nevada System shall continue to be:

1. To provide all public programs of postsecondary instruction in Nevada.
2. To sponsor and undertake those programs of basic and applied research which complement the programs of instruction and which contribute to the cultural, economic, and social development of Nevada and the nation.
3. To sponsor and conduct continuing programs of public service for the citizens of the state.

Priorities of institutions within the University of Nevada System for the next four years are described below.

The Universities

- University of Nevada, Las Vegas

The University of Nevada, Las Vegas seeks to become a first-rate university meeting both a comprehensive and an urban responsibility to the southern Nevada region. The university will continue its drive for excellence in teaching, research, and service during the remainder of this century. It will prepare students in breadth and in depth in a wide variety of academic offerings while contributing substantively to the enrichment of the community and the economy. The university will expand its present partnership with business and industry and participate in identifying and solving problems of the region and in fostering economic diversification. It seeks to broaden its graduate

offerings by implementing Ph.D. programs. The university is committed, above all, to academic excellence and to support values and conduct within the academic community that contribute to this end.

The following degrees and programs are projected as institutional priorities over the next four years.

1986-1987

Professional Development Degree, 1986. Source of funds; existing resources within the colleges of Science, Mathematics, Engineering, and Education.

Bachelor's degree in Medical Technology, 1987. Source of funds; state and private sector. Year one, $62,500; year four, $162,000.

Bachelor's degree in Health Care Administration, 1987. Source of funds; state. Year one, $82,000; year four, $124,000.

Bachelor's degree in Architecture, 1986. Source of funds; state and private sector. Year one, $336,204; year four, $428,604.

Ph.D. in Biology, 1987. Source of funds; state. Year one, $432,870; year four, $184,863.

1987-1988

Ph.D. in English, 1987. Source of funds; state. Year one, $41,250; year four, $41,250.

M.F.A. in Art, 1988. Source of funds; state. In planning stage.

Master's degree: Interdisciplinary Degree in Ethics and Policy Studies, 1987-1988. Source of funds; external and state. Year one, $85,000; year four $187,000.

Ph.D. in Sociology, 1988. Source of funds; state. In planning stage.

M.S.W. in Social Work, 1988. Source of funds; state. In planning stage.

Master's in Criminal Justice, 1988. Source of funds; state. In planning stage.

M.F.A. in Theatre Arts, 1988. Source of funds; state. In planning stage.

Master's degree in Statistics (Mathematics). In planning stage.

1989-1991

M.F.A. in Dance, 1989. Source of funds; state. In planning stage.

Masters degree in Architecture, 1989. Source of funds; state. In planning stage.

As a result of rapid departmental development, the following additional degrees could emerge for consideration late during the 1989-1991 biennium: Ph.D. in History; Ph.D. in Political Science; Ph.D. in Physics.

Program Trends

During the next two biennia the university shall also see continued emphasis upon the development of professional areas. The College of Business will be accredited, as should Civil, Mechanical, and Electrical Engineering.

The fine and performing arts will receive major attention and by 1991 UNLV will be well established as the major fine and performing arts center in the state of Nevada and will be well on its way to becoming a significant arts center in the Southwest. There will be expansion of existing arts facilities largely as a result of private funding.

- University of Nevada-Reno

During the past few years, the University of Nevada-Reno has made great strides in its quest for excellence. Many new programs have been added to the curriculum, while several others have been deleted through an internal review process. There are presently over seventy-five undergraduate majors, about sixty master's level programs, and eighteen doctoral programs. Research has received a much greater emphasis within the institution, and the University of Nevada-Reno has moved to the point where its research programs are competative nationally. Currently, there are research grants totaling over 5.4 million

dollars. Instruction remains the most important function of the institution, and new initiatives are planned to strengthen this commitment. The University is committed to high quality programs, as indicated by its sixteen professional programs. It has been able to attract many high quality new faculty and administrators to fill vacancies, and it is moving toward its long-term goal of becoming one of the nation's best middle-sized land grant universities.

At this time, UNR anticipates that it is entering a period during which relatively few new programs will be proposed, with the emphasis in academic affairs directed primarily to increasing the quality of existing programs. UNR will be proposing some new programs, of course, and these will largely be at the graduate level, for example the Ph.D. in Anthropology. As the University of Nevada School of Medicine continues its growth and maturity, it will be developing doctoral programs in several areas, such as a Ph.D. in Pharmacology and a combined M.D./Ph.D. degree for medical research. While these will be of vital importance to the enhanced stature of the school, they will be largely funded from non-state funds and will enroll small numbers of students. As in the past, however, new opportunities which cannot be foreseen in a long-range planning document might lead the institution to propose specialized programs, such as the recently inaugurated Master's of Judicial Studies, Master of Arts in Teaching Mathematics, and Master of Science in Computer Integrated Manufacturing Systems Engineering.

Desert Research Institute

The Desert Research Institute's primary goal is to maintain and improve its five center programs, further enhancing the DRI's state, national, and international reputation.

Priorities over the next four years will be to strengthen the research program which contributes to southern Nevada's intellectual community and strengthen the two designated programs of excellence initiated in 1986: the Program of Excellence in Rural Air Quality Studies, and the Western Regional Climate Center.

The Desert Research Institute will work to facilitate its research program by attracting discretionary funding through the DRI Research Foundation and through expansion of facilities in the Dandini Research Park and in southern Nevada.

The Institute plans to extend the cooperative research and education arrangements between DRI and the two universities, through appropriate faculty and student interactions.

The Desert Research Institute's academic role appropriately focuses on the support of graduate research activities through instruction by DRI faculty on select graduate and upper division courses, practical training of students through employment on funded DRI projects, and payment of approximately $75,000 a year in graduate tuition. The graduate student arrangement is mutually advantageous for DRI and the graduate schools at the University of Nevada, Las Vegas, and the University of Nevada-Reno and has considerable potential for expansion as those campuses' post graduate programs grow.

The directional trends for the research programs in the Institute's five centers are:

Atmospheric Sciences Center: Expand remote sensing capabilities; development of Western Regional Climate Center; strengthen modeling capabilities, particularly in studies of air mass transport over complex terrain; and strengthen in-cloud sampling and aerosol chemistry programs.

Biological Sciences Center: Expand controlled-environment greenhouse programs through improvement of facilities and increase of cooperative research efforts with other divisions of UNS and key university plant physiology research groups at such locations as Duke, Stanford, Carnegie Tech., etc.

Energy & Environmental Engineering Center: Expand activities in the new Program of Excellence in Rural Air Quality Studies; develop engineering technology capabilities for air quality instrumentation and methodology; increase center activities in urban air quality assessment and in theoretical and laboratory simulation studies of airborne transport and conversion of pollutants and acid deposition.

Social Sciences Center: Expand studies of historic and prehistoric human cultural developments in arid lands, examining evidence of transitions from nomadic to agricultural societies; increase efforts to transfer viable

low-cost and low technology water management techniques to applicable domestic or Third World settings; continue development of innovative computer-based anthropological analytical techniques.

Water Resources Center: Expand development of new techniques for assessing groundwater recharge characteristics; develop applications of engineering and modeling techniques for assessment and management of quality and quantity constraints on ground and surface water resources in arid environments; increase role of Center as recognized regional water resources research center of national stature.

The Community Colleges

- Clark County Community College

Clark County Community College will remain responsive to the changing needs of southern Nevada workers and employers. The institution will continue to actively gain input from members of its many occupational program advisory committees, the College's Vocational Education Advisory Committee, industry groups, unions, and community organizations on development of short-term training, initiation of new degree or certificate programs, and innovative approaches to delivery of educational services.

The college enthusiastically endorses the proposed change in the developmental ratio to 15:1 which will enable increased improvements and services in that area. The college has recently begun to purchase services in the Adult Basic Education program

to provide better and increased services for that portion of the population. Clark County Community College will continue to serve the needs of the functionally illiterate, high school dropouts, men and women whose education was in a language other than English, and last, but certainly not least, those who need to improve their communications skills in order to benefit from the College's transfer or occupational degree programs.

Continued cooperation between CCCC and UNLV faculty and staff will ensure progress on articulation of courses and programs. The University of Nevada, Las Vegas has recently renumbered many of their offerings which allows transfer students a better understanding of the articulation process. Two-plus-two (2 + 2) programs have been expanded to the University of Nevada School of Medicine through the new Laboratory Technician program, and a collaborative effort is being made with UNLV to provide a baccalaureate program in Dental Hygiene. A successful faculty exchange program in social sciences and communications areas has been developed, and is being expanded during the next four years.

The occupational areas will continue to improve and expand with the addition of newly purchased "state of the art" equipment. Continued efforts will be made to expand offerings and services with the use of this equipment.

A gradual increase in the number of liberal arts and sciences courses is anticipated as high school graduates who do not meet the new entrance requirements of UNLV and UNR take advantage of the broad range of courses in these areas offered at both campuses as well as at several outreach sites.

Science and Health Division faculty will be proposing new degree programs in opthalmic technician, medical records technician, physical therapy technician, and veterinary technician during the next four years.

As the southern Nevada drive toward economic diversification gathers force, the Business and Industrial Technologies faculty continue to develop courses and certificate of achievement programs which provide men and women with technical skills in such areas as office automation, microcomputer languages and operating systems, computer assisted drafting and graphics, and quality assurance engineering. In addition, an international business program is planned.

During the past years, the College has developed courses to train personnel for the burgeoning race and sport book segment of the resort industry. Clark County Community College will continue to work with industry representatives and college faculty to ensure that both short-term intensive training, as well as more traditional learning opportunities will be available to present and prospective employees of this industry.

- Northern Nevada Community College

The highest priority for Northern Nevada Community College will be to improve its Associate in Arts and Associate in Science programs, and its occupational and technical education. The Associate of Arts degree now has a unified set of requirements in all areas, and the requirements of the newly created Associate of Science degree are under study. The occupational-technical programs have all been strengthened through program review and revision.

During the next four years, NNCC plans to focus on maturing and on providing education for underserved people, rather than on adding a number of new programs.

A marketing research effort will be conducted which will establish priorities for action, and provide direction for the revision or expansion of offerings to meet the needs and interests of current and potential students. In addition, the campus will be conducting a number of program reviews through 1989. A related task will be to create a planning process for developing and revising goals, identifying opportunities, and designing strategies for communicating goals and achieving them.

New programs which will be considered over the next four years are as follows:

- Drafting and Construction Management
  A high priority will be placed on a combined drafting/construction technology program, perhaps emphasizing cooperative education with the mining companies.

- Electronics
  The possibility of reactivating an electronics program which was phased out in the late 1970's will be taken under consideration. Sophisticated new electronics devices in the gaming establishments and office automation require extensive training in the electronics area.

- Single Parent Program
  The existing Single Parent Program has developed a job-placement and cooperative education/internship program, and it has enhanced vocational programs generally. Now federally funded, it should be assumed by state funding.

- Corrections Education
  Three correctional facilities are now operating in the college service area with two others planned. NNCC should develop a plan for providing education for the shifting population at these facilities. Here as elsewhere, consideration should be given to educational telecommunications, computer-based instruction, and trained local tutors.

- The Winnemucca Center
  Up to 20% of the total NNCC enrollment comes from the Winnemucca Center, and NNCC should respond with an increased commitment to service to the college's second-most populous county.

- Truckee Meadows Community College

A major objective over the next four years for Truckee Meadows Community College is to tighten articulation agreements on two fronts--with the area high schools and with other institutions in the University of Nevada System. TMCC plans to develop common competency based curricula with the high schools and establish means for high school students to attain advanced placement to earn college credits. Formal articulation agreements for pre-majors intending to transfer within the University of Nevada System and the development of capstone, or 2 + 2 programs will be a priority.

While TMCC remains fully committed to the five components of its mission--university parallel education, occupational education, developmental education, student services, and community service--the college plans three particular program emphases during the next four years.

First, TMCC intends to reach aggressively into the business and industry community to perform specifically designed educational services for working people. This will necessitate tailor-made instructional programs for clearly identified target groups and involve a departure from the more traditional occupational programs where the students come to the college. Appropriate fee structures and credit equivalencies will be developed for these programs and a network of expert instructors will be identified.

Second, the curriculum will be revised to include more hands-on training in occupational programs. Prospective employers, advisory boards, and researchers note that occupational students who have had large amounts of hands-on training, are highly successful models for the rest of the occupational programs.

Third, emphasis will be placed on the performing arts. It is hoped that talented people will use the campus to develop their talents, and a carryover effect will be produced when the community sees the campus as vital, interesting, and culturally alive. This is an important first step in rounding out Truckee Meadows Community College's offerings.

The institution also intends to work internally with a faculty development program. In order to take the new directions proposed above, faculty must be prepared to take responsibility for and the imaginative lead in new college activities.

Truckee Meadows anticipates a new effort in seeking external funds for the college's special education needs, including grants, foundation monies, and individual contributions.

A special effort will be made to target the underserved in the community, including unemployed or displaced workers, ethnic minorities, displaced homemakers, handicapped people, low-income people, and older workers. Efforts will also be made to attract and retain more traditional students.

- Western Nevada Community College

Western Nevada Community College will continue its role in supporting the state's economic development effort. Occupational programs will continue to be closely tied to business and industry. This will be facilitated by increasing the number of occupational advisory committees.

Customized courses and programs are planned to meet the special needs of local industry. Most recently, the college has formed a new partnership with Richdel Corporation. Additional "quick-start" programs are anticipated in cooperation with the State Commission on Economic Development.

In the fall of 1987, the Machine Tool Technology program will be fully implemented. Equipment for the Machine Shop and Materials Testing Laboratory was approved by the last legislature.

Instructional programs will be reviewed on a continuing basis to ensure that student and community needs are met. A Program Review Committee established this year will be addressing several curriculum related issues in the area of developmental education. Several areas will be addressed in the administration and management of instruction as well.

The college will continue to increase its presence and service in the state prison. In addition, more emphasis will be placed on offering courses at Lake Tahoe.

The college will continue to develop and articulate liberal arts programs to meet the needs of transfer students, and it will continue to work to improve articulation with the universities.

Community Service course offerings and workshops will be expanded, as will the number of summer session offerings.

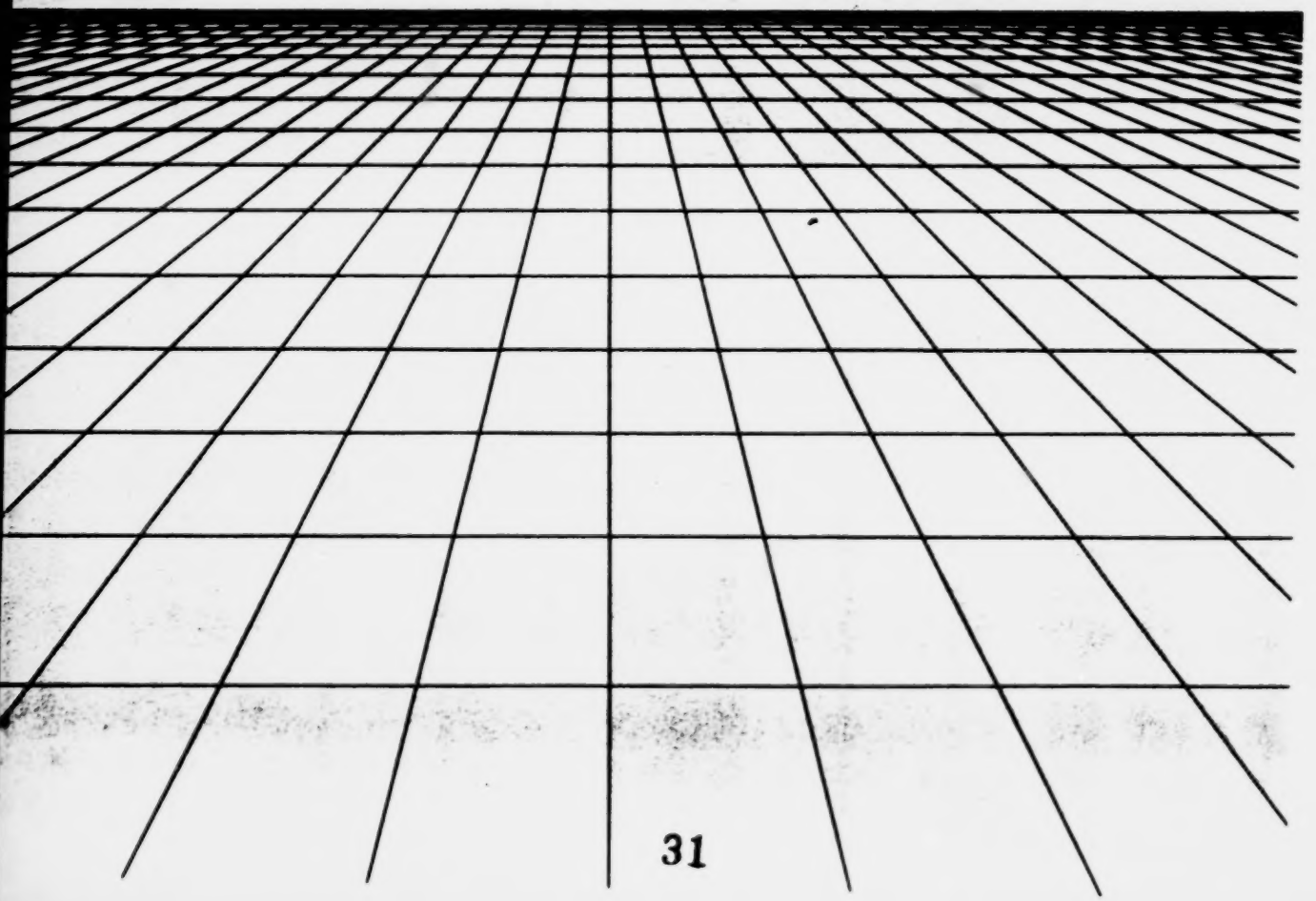
The campus will continue to plan and implement telecommunications support for instruction and administration as funding becomes available.

The Fallon campus will continue to develop courses and programs to serve special industry needs and the specific needs of the Fallon Naval Air Station.

UNIVERSITY OF NEVADA SYSTEM
New Program Proposals
1987 - 1991

Campus	Certificate	Associate	Baccalaureate	Masters	Doctorate	Other
CCCC	-Office Automation -Microcomputer Languages & Operating Systems -Computer Assisted Drafting & Graphics -Quality Assurance Engineering	-Opthalmic Technician -Medical Records Technician -Physical Therapy Technician -Veterinary Technician				-International Business Program
NNCC		-Electronics (reactivate) -Drafting/ Construction Management				-Focus on improvement of existing programs
TMCC						-Tailor made programs for industrial and commercial training -Strengthen fine arts program
WNCC	-Industrial Supervision					-"Quick-start" program developed in cooperation with State Commission on Economic Development
UNLV			-Medical Technology -Health Care Administration -Architecture	-Art -Ethics & Policy Studies -Social Work -Criminal Justice -Theatre Arts -Statistics -Dance -Architecture	-Biology -English -Sociology -History -Political Science -Physics	-Professional Development Degree
UNR					-Anthropology -Pharmacology -M.D./Ph.D.	-Emphasis on increasing quality of existing programs -Few new programs - largely at graduate level

PARTNERSHIP FOR PROGRESS



CHAPTER THREE

PARTNERSHIP FOR PROGRESS: THE UNIVERSITY OF NEVADA SYSTEM AND ECONOMIC DEVELOPMENT

The Nevada State Plan for Economic Diversification and Development calls upon the University of Nevada System to be a leader and an active partner in statewide economic diversification and development issues. High quality education is a leading factor in Nevada's economic diversification potential. According to the state plan,

> "If the University of Nevada System is to fully play its role in achieving a diversified economy, current trends must be reversed. Resources must be committed by the Nevada legislature to replace lost faculty through the provision of nationally competitive salaries." (page 24)

Programs, equipment, and facilities must be strengthened along with nationally competitive faculty salaries.

Higher education in Nevada helps provide an educated citizenry and aids individuals in achieving personal growth. It also has a direct impact upon the economic vitality of the state and the nation. The state plan calls for enhanced resources for higher education and recommends several additional initiatives, such as the establishment of product development centers, research parks, a statewide research fund, and start-up capital for occupational training courses. The capacity to accomplish research, and the ability to train and retrain Nevada's workforce, are central attributes of our university and community college campuses. Clearly, these campuses are major contributors to the development of human resources, high technology, and the development of managers, all important components of economic development.

Nationally, according to an SRI report on higher education and economic development, industry, state government, and communities are increasingly pressing public colleges and universities to become involved in economic development. As the report notes, "Colleges and universities have the capacity to help industry, states, communities, and others meet contemporary economic development needs and the potential to forge strategic new alliances on all sides." This study and others underscore the importance of business, government, and education participating as partners in a statewide effort to achieve success in economic development and economic diversification.

Improving partnerships with business and industry will contribute toward economic growth and development of the state. Both universities provide expertise in scientific, business, health, and other areas, and are major producers of business and professional leaders in Nevada. Organized programs for the development of new jobs, economic forecasting, and resources which benefit both business and citizens, are provided through a variety of centers and research institutes. The Desert Research Institute will also continue to be such a valuable resource to the state. Economic expansion and diversification will continue to be closely bound with higher education.

One of the primary missions of Nevada's community colleges is to provide occupational programs and technical training in response to community and business needs. Each of our community college campuses will continue to develop appropriate curriculum and programs which reflect the current and future requirements of

Implications for Colleges and Universities of the Changing U.S. Economy

Traditional Economy	New Economy	Implications for Universities
Slow-moving technology	Rapid technical change	Increased research, Technology transfer
Distinct technical fields	Merging technical fields	Interdisciplinary programs or centers
Little foreign competition	Strong foreign competition	Knowledge of new competition
Focus on domestic markets	Focus on global markets	Knowledge of new cultures, languages
Mass-produced products for mass markets	Complex products for sophisticated consumers	Technical aid for business
Growth in volume of products sold	Growth in value added to products sold	New products and more flexible processes
Human resources as a factor of production	Human resources as a competitive edge	Stronger educational system
Slow-changing skill requirements	Rapidly changing skill requirements	Lifelong learning, extension programs
Employment growth in Fortune 500	Employment growth in new/small firms	Support for entrepreneurship
Economic growth through smokestack chasing	Growth through new business development	Commercialization of new technologies

Source: SRI International, The Higher Education-Economic Development Connection: Emerging Roles for Public Colleges and Universities in a Changing Economy, Page 5.

business and industry in its service area. A significant step forward was accomplished during the legislative session of 1985 when "quick-start" legislation for the community college was approved. In order to provide the level of effectiveness achieved by similar "quick-start" programs in other states, Nevada, over the next two biennia, should budget regular funds for such programs. In the University of Nevada System's current biennial budget request, category five, "New Programs," includes a request for $200,000 in each year of the upcoming biennium for "quick-start" programs.

The enhancement budget submitted contains a section specifically centered on instruction and research enhancement, category three. This section includes requests to enhance current instructional formulas, full-time/part-time issues at the community colleges, mechanisms for budgeting graduate assistants at the two universities, student-faculty ratios at the community colleges (by adding a developmental ratio), book acquisitions at the libraries, and to adopt an equipment replacement formula for the entire System. This category also contains the UNS request for "Funding for Excellence" designed to support the state's efforts in economic development and to build Nevada's economic and educational future. Included in this request is the EPSCoR (experimental program to stimulate competitive research) project which contains Nevada's matching funds through a $3 million National Science Foundation grant. Nevada has already successfully competed for this project, with scientists at UNLV, UNR, and DRI proposing programs to meet the federal guidelines.

For implementation, Nevada must match the NSF grant. Returns to the state in the level of nationally competitive research and future grants should be substantial. Also included in the UNS budget are requests for scholarship and grant-in-aid funds. Substantial requests are also included for instructional and research equipment to keep equipment current with rapid changes in computing and scientific technology, and to allow state-of-the-art research.

The University of Nevada System, along with the governor and other state participants, sponsored the first Statewide Conference on High Technology and Economic Development that was held during the legislative session of 1983. The conference brought together representative leaders from business and industry, government, and education and developed recommendations for the state's future. The University of Nevada System, through the Governor's Interagency Coordinating Committee for Economic Development and Tourism, also helped sponsor the governor's conference on Public-Private Partnerships for Nevada's Economic Future which was held at the University of Nevada, Las Vegas in November, 1986. Similarly, representatives from the private sector, government, and education were brought together in a statewide symposium on economic development and economic diversification. High technology is dependent upon higher education and the University of Nevada System has demonstrated its desire and capability to serve as a full partner with business and government to achieve economic development in Nevada.

A continuing priority of the Board of Regents for the University of Nevada System is to provide comprehensive technical and engineering education on a statewide basis. The board has called for a commitment to support accreditation of engineering at the University of Nevada-Reno, technical training at the community colleges, and the new School of Engineering and Computer Science at the University of Nevada, Las Vegas. In order to strengthen and to provide quality programs in these fields, student-faculty ratios of 15:1 at the universities and 18:1 for the community colleges were achieved in the last legislative session.

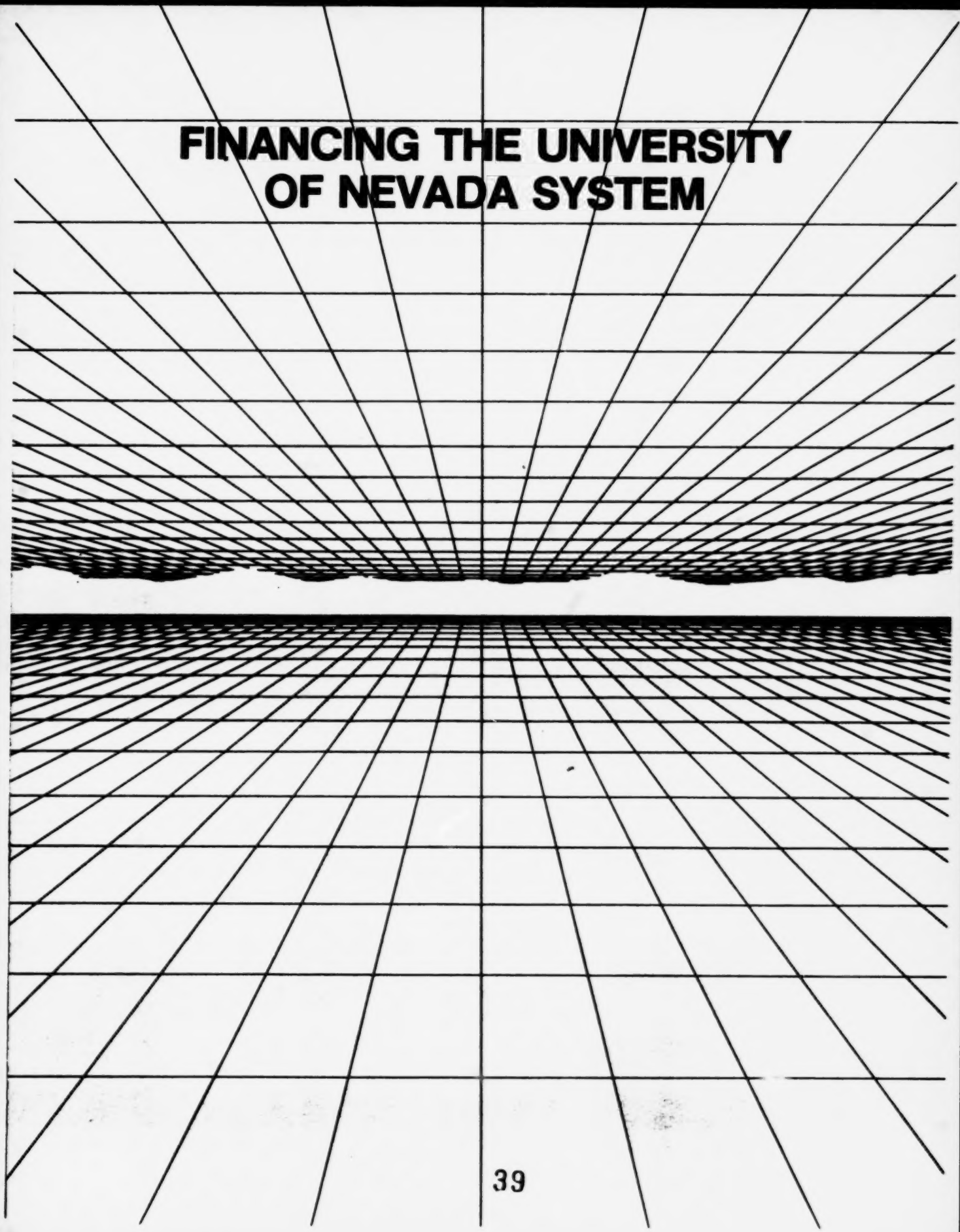
Over the planning period, our campuses will continue to seek success in primary research in areas from mining technology to medicine in order to better meet the challenge of economic development. The Desert Research Institute will continue to conduct millions of dollars of contracted research for governmental and private organizations demonstrating integration into the economic life of the state.

Also over this planning period of the next two biennia, our community colleges will be pressed by state needs to expand their role as key providers of postsecondary occupational training. Our community colleges have been shifting resources to meet this need, but they must retain their ability to meet other missions, such as liberal arts and developmental education. We must strive to preserve standards of traditional education and at the same time increasingly contribute to the economic health of the state. Additional resources will be required to achieve this goal.

System needs are comprehensive and extensive, and related to campus abilities to achieve educational and training goals. The primary goal for the future is to raise and maintain the quality of higher education in Nevada. Because we are as strong as our faculty, and we are a labor intensive organization, primary goals for the future are to enhance high quality faculty (by offering salaries very competitive on a national scale), enhance high student quality (through offering improved scholarships and raising standards), and enhance excellence in teaching, research, training, and public service.

With such support, the University of Nevada System can provide Nevada with a competitive advantage in our changing economy.

FINANCING THE UNIVERSITY OF NEVADA SYSTEM



CHAPTER FOUR

FINANCING THE UNIVERSITY OF NEVADA SYSTEM

Clearly, adequate resources are needed for the campuses of the University of Nevada System to pursue their goals of teaching, research, and public service and to offer programs of high academic quality to all students who enroll. Requests for state resources are identified in the System's 1987-1989 biennial budget request, and the "Executive Summary" of that document published under separate cover. Please refer to those publications for further information.

An important goal of the Board of Regents and the University of Nevada System is to obtain funding for the support of higher education in its pursuit of educational goals for the state. The Board of Regents strongly supported the adoption of Question 5 which amended the Nevada Constitution to permit Nevada to receive revenue generated from federal estate taxes. The federal government already collects an estate tax on property in Nevada that has a net worth of more than $500,000, and Nevada now will receive a rebate from the federal government on an annual basis. Every state except Nevada has been receiving a portion of this tax. With the passage of Question 5, the money received by the state will be divided between the public school system and the state university system. This provides an opportunity for the state to receive its share of the federal estate tax and use the money to improve public education. Revenues from this source will vary from year to year, but the University of Nevada System

submits budget priorities for enhancement funding that could be supported with such a rebate.

In response to a need to focus on the processes used to secure steady and adequate funding to achieve quality for all of higher education in Nevada, an interim legislative committee was established by the 1985 legislature. The committee, comprised of legislators, the state budget director, UNS presidents, and citizens from the private sector, was charged with reviewing how higher education formulas are constructed in other parts of the nation, and making recommendations to the 1987 legislature concerning the expansion of funding formulas for higher education. New formulas were developed to raise the level of state support and to increase the stability of the funding process; the attainment of these goals is desired to provide significant long-term benefits to higher education in Nevada.

Recommended formulas from the committee which have been incorporated into the 1987-1989 Biennial Budget Request are described below:

- A formula that ties positions in student services to numbers of full-time equivalent students (FTE) and headcount enrollment.
- A formula for academic support which recognizes the number of colleges and schools within the university and links financial support to instructional budgets.
- Institutional support formulas would be driven by a percentage of campus budgets.
- Library acquisitions would be determined by applying a version of the nationally known Clapp-Jordan formula statewide.

- Operation and maintenance of facilities would be funded based upon building size, campus size, and number of students (headcount).

- Student/faculty ratios would be rolled back to the levels in existence prior to 1981. (Ratios were increased when the state was experiencing financial difficulty and UNS is seeking restoration of the ratios.)

- Community colleges would increase the percentage of full-time instructors to part-time instructors to 70/30. (Under current standards community colleges are allowed 45% full-time faculty and 55% part-time faculty.)

- The number of UNR and UNLV graduate students would be linked to formulas rather than a flat dollar amount and their pay would increase to an amount equal to half of what a beginning instructor earns.

- Classified support for community colleges would be funded at 5:1 as it is at the universities.

- A formula linked to inventory would provide for replacement of equipment.

- Money would be allotted to equip new positions created.

- State support would be provided for summer school programs, which currently are self-supported.

The interim committee recommendations include preambles stating that timelines for incorporating the formulas will be developed as resources become available. The recommendations, when implemented, will provide improved, stable, and needed support for higher education.

University of Nevada System Biennial Budget Request

The University of Nevada System budget request consists of $363.7 million dollars. Of that request, $275.4 million would fund the "base budget" and $88.3 million would fund "enhancement" requests over the biennium. (See Table 1)

The "base budget" is an extension of the current year (fiscal year 1987) operating budget into the next biennium, with adjustments for projected enrollment increases, adjustments for past legislative actions, reorganizations, inflation and selected special adjustments.

The "enhancement" budget contains requests for new funding for strengthening and enhancing the existing university and community college programs along with requests for a limited number of new programs.

The base budget seeks a 7.5% increase the first year and 4% the second year to finance ongoing costs of UNS operations. In addition to maintaining existing programs, it provides for the following:

- Reducing student/faculty ratios to levels funded prior to 1981.
- Reducing classified ratios at community colleges to 5:1, the same level enjoyed by the two universities.
- Maintenance funding for new equipment funded by the 1985 legislature.
- Operating support for the administrative computing system funded in 1985.
- Inflation of 5% yearly. (This could be readjusted depending upon the inflation rate.)
- Merit pay of 2.5% yearly for teaching faculty.
- Special provisions including adding 30 positions to staff, new or expanded facilities, changes in campus auditing procedures, and utility rate increases.

The base budget formula is tied to student enrollment. The 1987-1989 request assumes that, Systemwide, student enrollment will increase by 3.3% in 1988 and 3% in 1989. It would fund 93.7 new faculty members and 36.5 new classified staff.

The $88.3 million "enhancement budget" is presented in priority order in five broad categories: salary increases for faculty and administrators, expansion of formulas affecting support services, enhancements for instruction and research, noninstructional enhancements, and requests for new programs.

UNS is seeking salary increases of 5% yearly, costing $11.1 million over the biennium, for its professional employees, and to increase the 2.5% merit pool to include all professionals. The state currently funds merit pay for teachers only. The cost of including nonteaching professionals is $1.6 million for the two years. The Board of Regents previously adopted salary goals to place UNS salaries for faculty and administrators in the top quartile of salaries nationwide.

The second enhancement priority would fund many of the aforementioned improved formulas to benefit support services such as academic support, student services, institutional support, and operation and maintenance of facilities.

The third enhancement priority, affecting instruction and research, seeks $44.1 million over the biennium. It would enrich instruction formulas by reducing full-time/part-time ratios of community college faculty from 45/55% to 70/30% increasing the number of graduate assistants and improving their salaries, reducing developmental education ratios at community colleges to 15:1, tying a formula to library book acquisitions, completing conversion to a computerized library system for the two universities, and creating a formula to replace equipment. In addition, it would provide funds for programs linked to Nevada's

economic diversification efforts such as $3 million to match federal funds provided by the National Science Foundation for research programs, funds for more scholarships and grants-in-aid to retain Nevada's top students, establishment of a statewide telecommunications network, and research involving Nevada's water supply. Money also would be spent to replace obsolete equipment and to buy modern equipment.

Priority four, a $10.9 million biennial request for noninstructional enhancements, includes $4 million to complete a UNS administrative computing project, and new professional and classified support staff for a variety of programs throughout UNS.

Priority five seeks $9.5 million to fund new programs, including "quick-start" programs for community colleges, more funding for a statewide telecommunications system, funds for the University Press, year-round funding to support summer school programs, and new programs at UNLV and Nevada's four community colleges.

TABLE 1

University of Nevada System
1987-89 Biennial Budget Request

Combined Summary

1987-89 Base Budget and Enhancement Budget Request

Appropriation Area	1985-87 Operating Base Budget	1987-89 Base Budget Request	Enhancement Budget Request: Professional Compensation Category I	Support Services Category II	Instruction and Research Category III	Non-Instruction Category IV	New Program Request Category V	Total Biennial Budget Request
System Administration	2,327,192	2,736,036	182,298	200,600	2,859,590	350,642	2,451,400	8,780,566
System Computing Center	7,781,181	9,416,510	373,207			4,068,000		13,857,717
Rad/Toxicological Safety Board	142,058	376,260	15,303					391,563
University Press	467,646	496,943	21,970	50,052			50,000	618,965
University of Nevada-Reno	74,298,104	80,093,398	3,466,808	2,728,811	15,888,922	2,006,259	2,033,458	106,217,726
School of Medicine	14,798,995	17,076,520	899,103		1,404,426	108,888		19,488,937
Intercollegiate Athletics, UNR	1,670,274	1,714,416	164,524					1,878,940
Statewide Programs, UNR	4,984,339	5,675,523	320,032					5,995,555
Cooperative Extension Services	7,233,715	8,015,740	449,345					8,465,085
Agricultural Experiment Station	7,990,154	8,801,373	482,919					9,284,292
University of Nevada, Las Vegas	68,652,107	81,139,703	3,485,872	2,775,683	13,441,253	2,632,387	3,708,047	107,162,945
Intercollegiate Athletics, UNLV	1,675,650	1,756,150	127,904					1,884,054
Statewide Programs, UNLV	720,711	750,637	58,173					808,810
Clark County Community College	19,796,134	22,009,069	1,028,099	1,681,735	4,699,884		585,672	30,004,459
Northern Nevada Community College	3,903,837	4,526,898	191,576	556,729	649,596	101,622	164,933	6,191,354
Truckee Meadows Community College	14,041,438	16,920,702	797,937	1,595,544	2,528,759	1,182,847	487,420	23,513,209
Western Nevada Community College	6,788,361	7,994,103	383,312	663,681	1,614,996	353,631	4,054	11,013,777
Business Center North	1,683,234	1,763,570	52,505	219,678		142,164		2,177,917
Business Center South	1,412,940	1,513,484	42,104	222,229				1,777,817
National Direct Student Loan	60,000	64,575						64,575
Desert Research Institute	2,364,075	2,535,153	189,861	372,236	1,015,922			4,113,172
SYSTEM TOTAL	242,792,145	275,376,763	12,732,852	11,047,048	44,103,348	10,946,440	9,484,984	363,691,435

Revised 12/8/86

Institutional Budget Priorities

Each institution in the University of Nevada System strongly supports priorities established by the Board of Regents in the UNS budget request. Support of this budget will allow campuses to maintain high quality facilities, programs, and faculty.

The Community Colleges

The priorities discussed below reflect funding requests for community colleges in order to adequately maintain current programs and develop new programs of high quality.

A 70/30 ratio of full-time to adjunct faculty is a very high priority, and will place Nevada's community colleges in line with the national median for other community colleges across the country. As well, a support staff formula should be developed using "headcount" as a primary basis, so that adequate staffing patterns may be established for the maintenance of quality education. A 15:1 ratio of students to faculty in developmental studies is another important goal. This ratio is consistent with national norms and will allow colleges to provide quality instruction in areas which require faculty to work closely with students.

Establishment of a telecommunications network should be given consideration to provide better communications within the University of Nevada System, to reach rural areas of the state, and for the development of additional educational opportunities for students.

Funding for equipment maintenance, on-line registration, and additional library acquisitions and automation are all necessary to maintain quality training programs and keep pace with rapidly advancing technology.

The Universities

The University of Nevada, Las Vegas and the University of Nevada-Reno reaffirm a commitment to increases in professional salaries, noninstructional support positions such as student services, academic support, and support for the business centers.

It is also important that the student/faculty ratio in the base budget return to the 20:1 ratio that had been used until 1981. Adjustment of the dollar figures in the base budget in order to accommodate increasing institutional costs is of importance as well.

The provision of more competitive salaries will enhance efforts to recruit and retain quality faculty and staff, and expanding and enhancing instructional and instructional-related programs will be of equal importance if the universities are to continue to provide quality instruction, research, and economic development activities for the people of the state.

The Desert Research Institute

In concert with the UNS budget priorities, the Desert Research Institute's highest priority is improvement of compensation for the professional staff supported by state funds. A second priority is an increase of state support to provide additional staff in the Controller's Office.

A development officer for the Dandini Park, replacement of research equipment which has become obsolete, state support to match National Science Foundation funding for EPSCoR research, and state funding to enhance the state's water resources are priorities of the Desert Research Institute for the next four years.

Capital Construction Needs

Improvement and/or construction of new campus facilities are needed at the universities and community colleges to accommodate expected growth over the 1987-1989 period and beyond. Facilities for students, instruction, faculty, and research, require expansion or remodeling to serve a projected annual increase in enrollment. In addition, enrollment projections described in the 1985-1989 Planning Report have been exceeded, which has resulted in exceptional growth for the System. The needs described below are required to serve the campuses, communities, and the state.

The Universities

The University of Nevada, Las Vegas

These needs, listed in priority order, represent campus requirements during the next two biennia:

Description	Estimated Cost
1. Plant Improvements	$ 929,000
2. Remodel Grant Hall	$1,485,000
3. Controlled Environment Ecological Research Facility: Biological laboratory to house plant growth facilities and research areas.	$ 300,000
4. Remodel Old Engineering Building	$ 150,000

5.	Remodel Old Library	$ 200,000
6.	Health Sciences: Instruction facilities for College of Health Sciences Department, Nursing, Radiologic Technology, Medical Technology, Physical Therapy, Occupational Therapy and Hospital Administration.	$9,360,000
7.	Track Facility Repairs	$ 200,000
8.	Astronomy Observatory to support the Astronomy Program.	$ 800,000
9.	Education Building Remodelings	$ 250,000
10.	Expansion of Chemistry Building	$1,800,000
11.	Lilly Fong Geoscience Building Expansion	$1,050,000
12.	Wright Hall Expansion	$5,000,000

The University of Nevada-Reno

Capital construction needs for the University of Nevada-Reno are as follows:

		STATE FUNDS	NON-STATE FUNDS
1.	Campus Improvements, Phase I.....	$ 3,605,050	
2.	Campus Improvements, Phase IA.....	1,233,513	
3.	Cell & Molecular Biology Center....	2,246,400	8,195,040
4.	Engineering & Scientific Laboratory Center, Phase I.....	6,287,000	
5.	Continuing Education Facility.....	1,500,000	5,100,000
6.	Mackay School of Mines, Phase II...		8,750,000
7.	School of Journalism.....	518,000	Remainder
8.	Campus Improvements, Phase II.....	3,524,300	
9.	Mackay Mines Restoration.....		7,000,000
	TOTAL...	$18,914,633	$29,045,040

The Desert Research Institute

A shortage of office and laboratory space in the DRI Dandini Park Building is restricting the expansion of funded research by several Institute Centers located in that facility. An immediate, short-term alleviation of this condition can be accomplished by remodeling available space in the Stead facility building.

Remodeling is also needed in the basement of the Dandini Park Building to allow expansion of archaeological laboratories and environmental plant physiology laboratories.

The Institute currently leases commercial space in Las Vegas and is in critical need of properly-designed, university-owned laboratory and office space.

For long-term space requirements in northern Nevada, there is considerable undeveloped space available in the Stead facility. Major remodeling of the facility would provide a cost-effective remedy for space requirements and accommodate program expansions in the air quality and atmospheric physics research programs.

The Community Colleges

Clark County Community College

In order to adequately train the technicians necessary for cost containment in the health related fields and for economic diversification, CCCC needs space allocations in three major construction areas.

a) Health Education Center: This addition would house all of the existing Health Occupation programs, newly proposed Health Occupation programs, and general education and science lab course rooms necessary for support of these program areas.

b) Henderson Campus Phase II: This addition would house several specialized program laboratories (Electronics, Graphics, Science, etc.) and general purpose classrooms. In addition to the classroom space, the facility would house a Learning Resource Center, Student and Faculty Support areas, and the Operations and Maintenance area necessary to service and maintain the buildings and grounds.

c) Cultural and Performing Arts Student Center: This addition would provide space requirements and facility areas for drama, art, music, student activities, student government, health and fitness, cafeteria and general purpose college classrooms. In addition, it would provide for space requirements for the rapidly expanding Continuing Education program and for a small Community Conference Center.

Northern Nevada Community College

Northern Nevada Community College has as its highest priority the remodeling of the life sciences laboratory, the creation of a physical sciences laboratory, and the development of a computer-assisted design/drafting laboratory.

Truckee Meadows Community College

Truckee Meadows Community College's Phase IV addition of approximately 50,000 square feet should be finished in the first

year of the planning period. In the next four years Phase V, or at least selected features of that phase essential to support academic priorities will be sought.

One such essential feature will be specialized space for the increased emphasis on hands-on occupational education. Another essential feature is space for performing arts.

Western Nevada Community College

Currently, Western Nevada Community College has three approved capital construction projects which await funding by the Nevada legislature. They are:

1. Phase III of the Carson City Campus

   Classrooms and special purpose instructional areas requested in this addition will place most of the Carson City campus instruction on the campus in close proximity to the Learning Resources Center and other facilities.

2. Phase II of the Fallon Campus

   The Fallon campus has demonstrated a growth pattern to support needed basic instructional facilities.

3. Expansion of the Learning Resource Center

   This expansion will provide for more efficient use of the existing space as well as providing the additional space needed for electronic media systems and production services.

CHAPTER FIVE

STRENGTHENING HIGHER EDUCATION IN NEVADA

Strengthening academic programs is a continuous goal of the University of Nevada System. The System has adopted several new policies which will impact higher education in Nevada in the near future. For example, in order to attract and retain high quality students and to strengthen high quality programs, new entrance standards have been adopted at the universities, scholarship programs have been expanded, and summer institutes established. To assure that students who enroll receive instruction of high quality, program review policies have been adopted and program assessment practices implemented. To meet the challenge of new technology and to use it wisely in the educational process, telecommunications policies have been recommended and academic computing needs have been identified. To improve the collection and the dissemination of data for improved planning and student transfer, a new survey of high school graduates has been completed and new Systemwide data collection processes implemented. These, and other important academic issues, are discussed below.

Improving Student Access to the University System

University Entrance Standards

In 1983, the University of Nevada System Board of Regents and the State Board of Education formed the Joint Council on College Preparation to develop a report which would describe the

skills and competencies necessary for students to succeed in university studies. Based upon recommendations from the final report, Making High School Count, and a review of university admission standards, the Board of Regents approved new entrance standards for the University of Nevada-Reno and the University of Nevada, Las Vegas. Effective fall, 1989, increased high school course requirements will be required of entering freshmen. These courses will ensure students a foundation of knowledge and competencies which will assist them in their successful pursuit of an academic degree.

Cooperative efforts have been made between Nevada's high schools and universities with regard to the implementation of these new standards. Meetings and workshops were held throughout the state to explain the new requirements to high school teachers and counselors, university faculty, administrators and students. Admissions officers from both universities have met with the director of the State Department of Education, as well as school district superintendents to discuss high school courses which would fulfill the new requirements.

In order to ensure admission to the universities of highly qualified students who may lack the required courses, alternative methods to satisfy the new requirements have been developed. Students may demonstrate, through grade point average and test scores, competency in specific subject areas. In addition, the policy contains guidelines for correcting high school course deficiencies prior to admission.

The new admissions policy reflects the universities' and Board of Regents' commitment to high quality education for Nevada's citizens.

Regents' Scholar Program

The Regents' Scholar Program was established by the Board of Regents in 1983, as a means to recognize outstanding scholastic achievement by Nevada high school graduates, and to encourage them to remain in the state. The program, developed in cooperation with the State Board of Education Nevada High School Scholars Program, initially awarded general elective credit to entering college freshmen who scored at the 94th percentile or higher on ACT standard examinations. Students selected as scholars represent the top 2% of all high school graduates in the state.

A subcommittee was formed in 1985 to review the effectiveness of this program. As a result of a survey of these scholars, and subcommittee recommendations, the Board of Regents determined that in order to establish a more effective recruiting tool, the award should be changed to an actual scholarship for each student. In addition, both SAT and ACT scores will now be used in combination with grade point average to evaluate potential scholars.

It is projected that in the 1987-1988 academic year, 100 students who qualify as Regents' Scholars will enroll in institutions within the University of Nevada System. Pending legislative funding, these students will be guaranteed a one-year minimum scholarship award for their first year of study.

The award of scholarships through the Regents' Scholar Program will provide a statewide recruitment tool, and will be one way to retain Nevada's most talented high school graduates in the state. To help reduce the "brain drain," a budget request of $216,000 for the biennium is included in the UNS enhancement budget in section three.

Summer Institute for Gifted and Talented Students

In an effort to motivate and challenge some of Nevada's brightest and best high school students, the University of Nevada System Board of Regents and the State Board of Education sponsored a pilot Summer Institute for Gifted and Talented Students. Forty-two high school students from around the state gathered at either the University of Nevada-Reno or the University of Nevada, Las Vegas for a week-long program in August 1986. The pilot project provided not only a stimulating and challenging learning opportunity but also gave participants a positive experience in campus living and created a greater awareness of the intellectual opportunities available at University of Nevada institutions. Twenty-six instructors from the two campuses each prepared presentations in the areas of communications, science and technology, economics, and social science. The University System also donated classroom and student housing facilities for each of the week-long institutes.

Participant and parent evaluations of the pilot institutes were overwhelmingly positive. A request for state funding of future institutes has been prepared and planning is underway for next summer's institute.

Tuition Reciprocity

In 1983, legislation was enacted which authorizes reciprocal agreements between the University of Nevada System and other states for waivers of nonresident tuition. A number of other states have in place similar laws under which designated boards or institutions may participate in arrangements for waiving the differential between resident and nonresident tuition on a reciprocal basis. Under these authorizations, many states have negotiated agreements with neighboring states in the interest of student access, program quality, and economy.

Nevada participates in the Western Interstate Commission for Higher Education (WICHE) Regional Graduate Program which extends resident tuition privileges to students from twelve western states in nearly 100 distinctive graduate degree programs. In addition, effective fall 1985, a limited agreement was established between the University of Nevada-Reno and Lassen Community College for students majoring in agriculture.

The University of Nevada, Las Vegas and the University of Nevada-Reno also participate in the National Student Exchange program. Students may enroll in a college located in another state during their sophomore or junior year without paying out-of-state tuition.

The University of Nevada System is exploring the possibility of developing additional agreements. Higher education representatives in Arizona and Utah, as well as principals and counselors in northern California, have also made inquiries regarding tuition policies.

A Systemwide Tuition Study Committee has recently been appointed to study a variety of proposals concerning tuition. Options under consideration include tuition reciprocity agreements with neighboring states, program specific exchanges, and the closest-college concept. These, as well as other options such as prepayment of tuition, and tuition benefits for scholarship recipients, will be evaluated by this committee to determine their cost effectiveness and benefits for the state. Final recommendations will be made to the Board of Regents early in 1987. Implementation is expected for selected agreements over the four year planning period, 1987-1991.

Strengthening Quality Programs

Program Review

The review and approval of new programs at University of Nevada System institutions is an important function of the Board of Regents. To help ensure that new programs will be of high quality, the Board continues to require that institutions provide specific information on the justification of and the need for new programs, as well as details on curriculum, students, faculty, facilities, equipment, library resources, and funding. These factors are examined carefully by the Board of Regents before action is taken on a proposed program. This review is applicable to the addition or change of all new degree programs, departments, schools, or colleges at each campus. A two-phase process of Systemwide review was established in 1967 by the Board of Regents, with modifications in subsequent years.

A revised review format will include a section which addresses existing program review. This new policy will include an assessment of directly related resources and programs for each new program proposed within the System.

The review of existing programs has seen considerable growth over the past few years. A majority of state level higher education boards are engaged in the review and approval of academic programs, mostly at the graduate level, including Nevada.

In 1983, the Board of Regents requested and received comprehensive reports on existing program reviews of each institution. Effective in 1987, the review of existing academic programs will be conducted by each institution on a regular cycle in order to assure academic quality, and to meet the needs of Nevada students.

Developmental Education

In January, 1985, the Board of Regents accepted a report on developmental and remedial education within the University of Nevada System. This report described the extent of programs offered for students with academic deficiencies, focusing on enrollment, personnel, course offerings, and funding. The report points out that studies are primarily in the areas of writing, reading, and mathematics. Enrollment in remedial courses through the universities was described as very limited, while developmental enrollment in the community colleges was more extensive, as this is one of the five basic missions of the community colleges. Due to the individualized instruction

necessary to provide basic skills courses, a major recommendation from this report was that student/faculty ratios in developmental programs at the community colleges be reduced. The 1987 System budget request to the legislature includes a recommendation that the funding formula for developmental education be set at 15:1 for the community colleges.

In another area, it has been a long standing policy that developmental education courses offered through the community colleges not be transferable to the two universities. In August 1986, the Board of Regents approved a policy that developmental courses will also not be applicable toward completion of the Associate of Arts, Associate of Science, or Associate of Applied Science degrees, awarded through any University of Nevada System community college. Necessary remedial and developmental course work will be completed in addition to the collegiate level requirements of the degree program. This policy will ensure the integrity of these associate degrees and reaffirm the University of Nevada System's commitment to quality.

Assessment and Evaluation

Nevada's colleges and universities are responding to a call for ever-better instruction and programs of study to prepare students to meet the challenges of a constantly changing and increasingly technological society. Measuring educational outcomes is one way to provide accountability and excellence in higher education.

Assessment programs can provide feedback to help ensure effective teaching and learning, and provide students

comparisons with others in their field. It can also provide input for short- and long-term planning. A variety of measures can be described as assessment tools including value-added testing, "rising junior" examinations, or existing grading and examination processes. In addition, surveys of students and alumni, outside reviews of academic departments, performance of graduates on tests or licensing examinations, graduates' attainment of advanced degrees, and accreditation can provide a multitude of alternatives which can be used for evaluation.

The National Governors' Association Task Force on College Quality released a final report in August 1986, which states that "each college and university should implement systematic programs that use multiple measures to assess undergraduate student learning." The report points out that these programs should be appropriate to the mission of the institution, and that the information gained from assessment should be used to evaluate institutional and program quality.

A number of measures are currently being utilized at each institution within the University of Nevada System to evaluate academic accomplishments. A review of these measures, as well as a comprehensive evaluation of assessment plans for each campus is being undertaken by the Chancellor's Office. Due to the mix of programs, missions, and types of students at the different institutions, multiple assessment approaches will be employed within UNS. Common characteristics will be used to form a Systemwide perspective.

Educational Telecommunications

Any plan for higher education to the year 1991 and beyond must take into account the incredible impact of new technology on education. New methods of instructional delivery, including telecommunications and computer-aided instruction will be increasingly integrated into existing educational settings. Telecommunications networks and regional consortia will make borders between college service districts and states increasingly arbitrary boundaries. Higher education institutions and systems have begun to grapple with new policy questions and issues as technology plays an ever larger role in educational delivery.

The University of Nevada System, with its large geographical service area, has long considered the potential of telecommunications as an educational delivery system. Students and professionals in need of continuing education could be better served in rural and remote areas of the state, occupational training programs could be delivered to work sites, and those who are home or institutionally bound could be served. A survey conducted in November 1984 revealed, at that time, seventy-nine courses were being taught throughout the System via telecommunications. Enrollment in these courses accounted for approximately 2% of System enrollment. In an effort to coordinate current System telecourse policies and to effectively plan for future programs, in April 1985, the Board of Regents formed the UNS Task Force on Educational Telecommunications.

The task force was charged with recommending policy which would guarantee an integrated system for telestudies in the System, recommending policies pertaining to minimum standards of instruction, funding formulas, and administrative policies and procedures, recommending financial considerations and quality assurances to all System institutions, and recommending ways of funding the cost of delivery. The task force was divided into two subcommittees; the Subcommittee on Quality and Administration, and the Subcommittee on Delivery, Coordination, and Funding. Since its inception, the task force and its two subcommittees have accomplished many of these charges including the preparation of a statewide plan for educational telecommunications in Nevada along with cost estimates for such a plan, the preparation of a policy statement on quality guidelines for UNS telecourses, an information clearinghouse in the Chancellor's Office for System telecourses, the preparation of campus engineering plans for Local Area Networks (LAN) that will eventually link to form a Systemwide LAN, and the production of a statewide telecourse on the U.S. and Nevada Constitutions. These last two accomplishments required extended efforts and resources. The LAN project was sponsored by a grant from the Regents' Special Projects Fund. A request for proposal was distributed in March 1986 and Sytek Corporation was awarded the contract. Engineering plans are in the process of being completed for all campuses. The University of Nevada-Reno already has an operating LAN and other UNS campuses are in the process of beginning theirs. The statewide telecourse on the U.S. and Nevada

Constitutions was sponsored from grants by the Nevada Humanities Committee, the National Endowment for the Humanities, and Valley Bank of Nevada. The course was aired over public television stations beginning in September and concluded in December with two segments locally produced on the Nevada Constitution. The course had an enrollment of over 120 students and successfully demonstrated how effective this type of instructional delivery can be.

In order to implement the proposed state plan for educational telecommunications in Nevada, state resources are needed. Included in the System 1987-1989 budget request are two categories for telecommunications. The higher priority request is for personnel, operating, and equipment to continue our planning efforts and to extend our current capacities through the establishment of a facsimile network, an expanded audio teleconferencing network, and media classrooms throughout the state. The second request is for additional equipment to continue to expand our efforts. It is our hope that funding of these priorities will allow us to continue to effectively and efficiently serve the citizens of this state.

Academic Computing

Since 1983, three Systemwide committees have functioned to coordinate computing-related issues throughout the University of Nevada System. The Management Systems Committee, chaired by the Deputy Chancellor for Administration, oversees administrative computing and has worked with the University of Nevada System Computing Center (UNSCC) to implement the Administrative Systems

Enhancement Project. The Academic Computing Committee (ACC), chaired by the Vice Chancellor for Academic Affairs, oversees computing needs related to instructional, research, and other academic computing (including library needs) within the System. Representatives from these two committees, nominated by campus presidents, serve on the Computer Policy and Planning Committee chaired by the Executive Director of the UNSCC.

The Academic Computing Committee has been responsible for recommendations concerning academic, research, and instructional computing throughout the UNS. There is consensus throughout the System that adequate academic computing resources are necessary for campuses to provide high quality teaching, research, and public service. The reputation of individual campuses as quality instructional institutions and their ability to receive outside support and grants will be significantly affected by the ability of the System to improve academic computing. The ACC has been aware that significant academic and instructional computing needs have gone unmet throughout the System. The UNSCC was initially formed to meet administrative computing needs, and while it has accepted responsibility for many academic computing needs, there have never been adequate resources to address all of the needs. Campuses have attempted to meet academic and instructional computing needs through the use of their own resources obtained through gifts, grants, allocation of equipment and operating dollars, and whatever other resources were available. While progress has been made in the area of academic computing, the ACC wishes to assure that the most effective use is being made of available resources.

In October 1985, with financial support provided by the UNSCC, the ACC distributed a Request for Proposal to study the academic aspects of computing within the UNS. EDUCOM, a nationally recognized consulting group in academic computing, was selected to do the study, and in January 1986, a team of four consultants visited the UNS campuses.

The EDUCOM final report was issued in March 1986 after extensive consultation with campus and UNSCC computing representatives. The recommendations of the consultants were widely distributed and were formally accepted by the Academic Computing Committee. At the direction of the UNS Board of Regents, the ACC joined with the Academic Affairs Council (a Systemwide committee composed of campus chief academic officers) to form an Ad Hoc Committee overseeing the implementation of significant EDUCOM recommendations. Under the direction of this ad hoc committee, representatives from the campuses and the UNSCC have developed a five-year computing plan for the campuses and for the UNSCC. This plan identifies campus priorities in academic computing, the ability of the UNSCC to meet these priorities, and short- and long-term actions to address unmet priorities. Besides this important planning document, the ad hoc committee is also overseeing the revitalization of the current computing advisory committee structure, the establishment of formal computing organizations on each campus, the upgrading and better utilization of monthly accounting reports on academic computing from the UNSCC, the possible reallocation of computing resources based on campus and UNSCC plans, and the development of

strategies to move toward more generally available academic computing hardware and software than is now used at UNS.

The continued coordination and review of academic computing by the Academic Computing Committee will help to ensure quality programs, instruction, and research at the University of Nevada System. Academic computing will remain a priority within the University of Nevada System, as the academic quality of instruction and research will increasingly depend upon our ability to acquire and use new technology. The next two biennia are crucial. Needed equipment, much computer related, is included in the budget request.

Review of Equipment Purchases

In order to strengthen instructional programs, the Regents of the University of Nevada System requested resources from the 1985 legislature to purchase new equipment and to replace obsolete equipment for instructional programs and academic support areas. The legislature, through A.B. 469, appropriated $12,640,926 to the campuses and to the UNSCC for this purpose, as well as for computing and library support.

In June 1985, the Board of Regents, through the Legislative Liaison Committee, formed a Systemwide Equipment Review Committee to review all equipment purchases made under the A.B. 469 appropriation. The committee was charged with reviewing equipment purchases for System compatibility and to pool purchases to ensure the best value for dollars expended. The committee formed a Purchasing Subcommittee to develop purchasing guidelines and procedures for reviewing these equipment

purchases. Additionally, in response to a recommendation by the Purchasing Subcommittee, the two purchasing centers jointly issued a Request for Proposal for System master discount agreements in October 1985. Significant master agreements have been negotiated, resulting in enhanced equipment resources.

Through this process the Board of Regents has demonstrated accountability for resources expended, and achieved the greatest impact possible with purchases made.

Improved Information for Planning

Transfer Guide

The UNS Transfer Guide is published in order to provide a comprehensive document of course-transfer agreements between the UNS community colleges and the two universities. As a result of work by the UNS Articulation Board and the Chancellor's Office of Academic Affairs, the Transfer Guide has been distributed to the six campuses semi-annually since March 1983.

The guide offers program-oriented listings of all lower-level transferable courses taught in the community colleges, lists (where applicable) specific transfer equivalencies at the two universities, and describes transfer and admissions policies as enacted by the Board of Regents. In addition, the Transfer Guide provides example programs of study for transfer, a directory to further help at each institution, and general information to aid students thinking of transferring within the System.

Academic advisors, students, and counselors use the Transfer Guide to plan community college students coursework for optimal

transfer to UNR or UNLV. Because the Transfer Guide consolidates all the articulation agreements between the community colleges and the universities in one reference, it is used by admissions staff at the universities to evaluate transferability and equivalency of credits earned at the community colleges.

Because the Transfer Guide is used by a large number of individuals at all six UNS campuses, and because timeliness and accuracy are important in assisting students with the transfer process, the UNS Articulation Board has placed high priority on computerization of the Transfer Guide. Currently, the Transfer Guide is being translated from the Chancellor's Office word-processor to a unix-based data-management system. By spring 1987 all System campuses will have computerized access to up-to-date transfer information. This will facilitate student planning, conserve advisors' time for counseling, streamline transcript evaluation, and reduce the clerical load in updating and printing the guide.

The computer format offers a potential for expansion of the transfer information system. It is intended that university departments will eventually provide detailed specifications about transfer-course applicability for major programs. Implementation of this proposal is planned over the next two biennia. Incorporating this information into the computerized Transfer Guide will enable community college students to better evaluate their progress toward major requirements upon transfer to UNR or UNLV.

Systemwide Data Collection

In order to do effective planning it is necessary to collect and maintain useful data. The Systemwide data collection and coordination function has been centralized in the Chancellor's Office in the Office of Institutional Research. Institutionally specific data on student enrollments, degrees granted, and library statistics, are examples of some of the kinds of data collected periodically. Many of these data are required to be reported to the Department of Education through their Higher Education General Information Surveys (HEGIS). The UNS Institutional Research Coordinator has functioned as the HEGIS coordinator for Nevada public institutions of higher education.

The U.S. Department of Education has initiated a new data reporting system, the Integrated Postsecondary Educational Data System (IPEDS) to replace the HEGIS surveys. While the same kinds of data will be collected, the universe of reporting institutions will be broadened from institutions of higher education to all postsecondary educational institutions. The first IPEDS surveys were distributed to the states in the fall of 1986 and by fall 1987 all HEGIS surveys will be replaced by IPEDS surveys. The Chancellor's Office of Academic Affairs participated in the designation of a state IPEDS coordinating committee and developed a state coordinated IPEDS response. The UNS Institutional Research Coordinator was designated as the statewide IPEDS coordinator for all public postsecondary institutions in the state. As part of those responsibilities,

statewide workshops were developed and held with all institutional personnel to better implement the statewide response to the IPEDS surveys.

In addition to the data collected and coordinated through the IPEDS surveys, the Chancellor's Office is also responsible for the collection and reporting of data to the U.S. Department of Education's Vocational Education Data System, and the collection and reporting of other data to various agencies such as the Western Interstate Commission on Higher Education and the State Higher Education Executive Officers.

The Chancellor's Office will continue to collect, report, and analyze data important to the planning of higher education in the state. Not only will continuing data bases be updated and analyzed for trend information, but important new data bases will continue to be established. One example of new data collection is the Nevada High School Senior Survey completed for the first time in May 1986.

High School Survey

The Chancellor's Office of Academic Affairs designed and administered a survey questionnaire to all Nevada high school seniors in May 1986 in order to learn more about them and their postsecondary plans. The survey was designed to provide secondary and postsecondary educational planners valuable information concerning demographic characteristics, high school experience, and postsecondary plans of these students. Additional information on factors influencing students' choice of postsecondary institutions and students' impressions of the

University of Nevada System institutions was also collected from those students indicating postsecondary educational plans. Five thousand six hundred eighty-one surveys were completed and returned for a response rate of 60%, a sample size sufficient to ensure statistical validity.

A report on the survey was published and presented to the Board of Regents in October 1986. Overall, the survey results indicate that a majority of Nevada's high school students intend to continue their education. Highlights from the report include:

- 59% of survey respondents intend to enroll in a post-secondary educational program in the year following their graduation.
- 82% of survey respondents intend to continue their education sometime in the future. 58% of these respondents intend to pursue a two- or four-year degree program, 15% intend to complete a vocational/technical program, and 9% intend to take job related or self improvement courses.
- 57% of students planning to continue their education plan to do so in Nevada.
- 60% of students planning to continue their education prefer to attend a public institution, 60% prefer a four year college, 40% a two year college.
- 86% of responding students expect to work to help fund their postsecondary education, 78% expect parents or other relatives to help fund their education, and 66% expect assistance from grants, scholarships, or loans.

Analysis and interpretation of the survey data provided important information to the University of Nevada System. The survey results clearly indicate that a large proportion (82%) of Nevada high school seniors intend to continue their education in some fashion beyond high school. There is demand for both two-

and four-year degree programs, as well as vocational/technical programs and job related or self improvement courses. Students indicated that they will continue to need financial support in their pursuit of higher education, either through scholarships, grants, loans or employment opportunities. As population increases in the state, and as students act on their intent to enroll in postsecondary programs, the University of Nevada System, committed to providing equal access to high quality education for all Nevadans, must prepare to meet an increased demand for services during 1987-1991 and beyond. Not only will the System need to serve more students, but it is likely that in Nevada, as in the rest of the nation, the profile of the typical student will continue to change as more minority and older students enter postsecondary education programs.

Based on information outlined in the survey report, the Board of Regents adopted recommendations calling for the University of Nevada System to prepare for continued increases in enrollment, to continue to improve and increase high quality programs, to form a committee of appropriate persons to study financial aid programs from a Systemwide perspective, to prepare a System brochure that will outline the variety and depth of programs offered by UNS institutions, and to continue to survey high school seniors on a periodic schedule in order to establish a historical data base and trace trends over time. This data base will be established at the end of the planning period, 1987-1991.

CHAPTER SIX

UNIVERSITY OF NEVADA SYSTEM CHARACTERISTICS: DEMOGRAPHICS, ENROLLMENTS, AND DEGREES AWARDED

The University of Nevada System has experienced enrollment growth beyond what was predicted in our last planning report. Headcount enrollment for fall 1985 exceeded predictions by over 4%. Fall 1986 enrollment is nearly 50,000 students, a number not expected to be reached until 1990. In order to plan for future enrollments and to predict their influence on UNS institutions, it is important to look at national and state demographics, including the changing mix of racial ethnic groups and to look at the implications of these demographics for higher education.

A major impact on higher education planning today is the change in demographics. Predictions of enrollment decline caused by a drop of the population of the traditional college age group, the eighteen- to twenty-four-year-old cohort, have been included in national reports. Over the last few years, however, these predictions have been revised, as nationally higher education enrollment has held fairly steady with some minor declines. It is becoming apparent that declines in the eighteen- to twenty-four-year-old group are being offset by enrollment increases by "non-traditional" students. Future enrollment predictions are based not only on the number of eighteen- to twenty-four-year-olds and the number of non-traditional students expected to enroll in postsecondary educational programs, but also on the

changing economy of the nation and the changes in the racial-ethnic composition of the population, both with far-reaching implications for higher education.

Population growth in the United States has slowed significantly and will continue to do so. By 2000 it is predicted that the percentage share of fifteen- to thirty-year-olds will decline from the current 40% of the population to 30% of the population. In addition, due to the differential birth rates of various segments of the population, it is predicted that by that same year one of every three Americans will be a member of a racial minority. The pecentage of blacks and hispanics within this fifteen- to thirty-year age group will rise sharply. This age group is not only the traditional college going group, but also the traditional recruiting group for entry level positions in the business world.

As the population of fifteen- to thirty-year-olds continues to shrink, higher education, the military, and business will increasingly compete for these same people. The effect of this competition on higher education will likely accelerate the trend toward more part-time and older students. As job opportunities become more plentiful, students will likely try to balance work and education or may even delay education until such time as it will be beneficial to them at their work. As the work place becomes increasingly complex with the introduction of new technologies, the average worker will require more and more continuing education. It is predicted that by the year 2000 between 2% and 3% of the nation's workforce will need to be

retrained each year. Postsecondary educational institutions will increasingly become involved in the training and retraining of this workforce.

In Nevada these same issues are influencing higher education planning. Currently, Nevada is the third fastest growing state in the nation and it is projected to continue to grow through the end of the century to a population of approximately 1,400,000. Nevada was one of only ten states to increase its overall population by more than 10% from 1980 to 1984. Over this same period Nevada's population of school age children (five to seventeen) increased 2.6% and the population of preschool age children increased 25.5%. Local school districts in Nevada are already feeling the effects of this "mini baby boom" and by the 1990's, the first wave of these young adults will be entering UNS institutions.

The implications for the University of Nevada System are tremendous. Not only will the System be serving larger numbers of students, a predicted 62,700 by the year 1991, but also an increasingly diverse group of students. In Nevada, as in the rest of the nation, access to higher education by those who have not traditionally participated will become more and more important as we increasingly depend on this population for our economic future. System planners must anticipate and meet developmental needs of these students while continuing to provide high quality programs. The number of part-time and older students will continue to increase and their impact, especially on the community colleges, will be great. Resources must be

provided to meet the needs of part-time students who will require more and different student services such as academic and career counseling and child care services, as well as other traditional services during evening and weekend hours when these students will be available for classes. Notions about financial aid and assistance will need to be re-examined as the traditional student continues to change.

A look at UNS trends in enrollment bear out our future predictions. Systemwide enrollment has increased 21% from 1981 to 1986 (Figure 1). A look at projections for the pool of high school graduates in Nevada (Figure 3) shows an anticipated increase in the number of these students from 1987 to 1990. The actual number of high school graduates has exceeded the predictions since 1982, and will probably exceed predictions for these years as well. The 1986 UNS Survey of Nevada High School Seniors also provided information that a large proportion (82%) of Nevada high school seniors expects to enroll in postsecondary programs. Not only will the number of high school seniors be increasing, but the vast majority of them will be seeking postsecondary education.

An examination of the U.S. Department of Education, Center for Statistics HEGIS "Surveys of Fall Enrollment in Colleges and Universities," 1981 to 1986, for UNS institutions also reveals that the same demographic trends seen nationally are also seen in Nevada. During this period minority enrollment increased from 11.8% to 14% of total System headcount enrollment. Part-time enrollment also increased. The two universities experienced an

increase in their part-time enrollment from 48% to 52%, while the community colleges experienced a growth in part-time enrollment from 87% to 92%.

Full-time equivalent (FTE) enrollment also increased from 1981 to 1986, but at a lesser rate. Systemwide FTE enrollment increased 10.9% (Figure 2). While the slower rate of increase is expected due to the large number of part-time students, especially at the community colleges, a look at the growth in degrees awarded over this same period (Figure 4) shows that students are persisting to a program completion, but most likely at a slower rate. Systemwide total degrees awarded increased 28.5%, with certificates showing the largest increase (122.6%) and Masters and Doctoral degrees awarded remaining steady as was predicted in previous planning reports.

Figure 5 depicts new estimated average annual growth rates for UNS institutions provided by each institution. Average annual growth rates were adjusted from the last planning report based on past enrollment trends. Figures 6 and 7 represent System enrollment projections to the year 1991 based on these growth rates.

The University of Nevada System faces a tremendous challenge over the next planning period. Not only will increasing numbers of students be seeking higher education, but an increasingly diverse population of students will also be enrolling. The UNS reaffirms it commitment to access to quality educational programs for all Nevada students.

FIGURE 1

University of Nevada System
Student Headcount Enrollments, Fall 1981-1986*

	Fall 1981	Fall 1982	Fall 1983	Fall 1984	Fall 1985	Fall 1986	5-Year % Change
Universities[1]							
UNR							
State Supported	9,242	9,577	9,548	9,522	9,260	9,613	4.0
Continuing Education	359	411	786	898	557	632	76.0
TOTAL	9,601	9,988	10,334	10,420	9,817	10,245	6.7
UNLV							
State Supported	10,441	11,292	11,021	10,894	11,856	12,722	21.8
Continuing Education	103	160	64	94	152	124	20.4
TOTAL	10,544	11,452	11,085	10,988	12,008	12,846	21.8
Universities							
State Supported	19,683	20,869	20,569	20,416	21,116	22,335	13.5
Continuing Education	462	571	850	992	709	756	63.6
TOTAL	20,145	21,440	21,419	21,408	21,825	23,091	14.6
Community Colleges[2]							
CCCC							
State Supported	8,460	9,688	9,207	9,143	10,029	11,763	39.0
Other	535	389	497	678	1,067	1,237	131.2
TOTAL	8,995	10,077	9,704	9,821	11,096	13,000	44.5
NNCC							
State Supported	1,461	1,488	1,489	1,480	1,928	1,764	20.7
Other	156	250	77	58	72	254	62.8
TOTAL	1,617	1,738	1,566	1,538	2,000	2,018	24.8
TMCC							
State Supported	6,650	7,088	7,046	6,422	6,493	7,390	11.1
Other	1,023	1,160	1,341	1,133	936	556	-45.7
TOTAL	7,673	8,248	8,387	7,555	7,429	7,946	3.5
WNCC							
State Supported	2,740	2,492	2,948	3,152	3,320	3,898	42.3
Other	85	51	44	101	61	46	-45.9
TOTAL	2,825	2,543	2,992	3,253	3,381	3,944	39.6
Community Colleges							
State Supported	19,311	20,756	20,690	20,197	21,770	24,815	28.5
Other	1,799	1,850	1,959	1,970	2,136	2,093	16.3
TOTAL	21,110	22,606	22,649	22,167	23,906	26,908	27.5
SYSTEM							
State Supported	38,994	41,625	41,259	40,613	42,886	47,150	21.0
TOTAL	41,255	44,046	44,068	43,575	45,731	49,999	21.2

*Figures may not total due to rounding
[1]Data reported from Registrars' First Reports.
[2]Data reported as of 10/15
IR 11/86

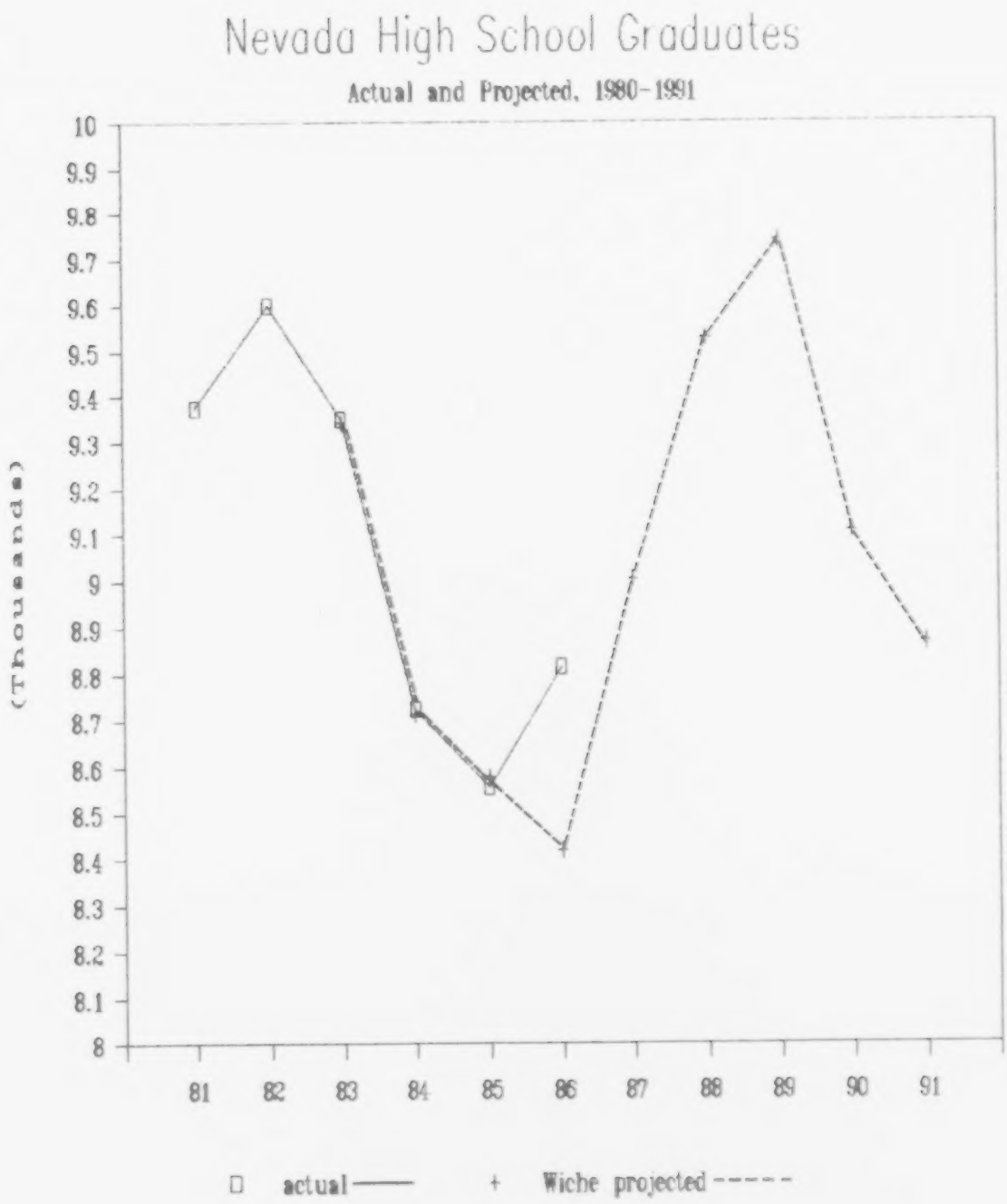
FIGURE 2

University of Nevada System
Student FTE Enrollments, Fall 1981-1986*

	Fall 1981	Fall 1982	Fall 1983	Fall 1984	Fall 1985	Fall 1986	5-Year % Change
Universities[1]							
UNR	7,055	7,178	7,185	7,207	7,068	7,159	1.5
UNLV	6,712	7,295	7,200	6,958	7,381	7,773	15.8
University Sub-Total	13,767	14,473	14,385	14,165	14,449	14,932	8.5
Community Colleges2							
CCCC	3,329	3,858	3,513	3,470	3,550	3,692	11.0
NNCC	394	424	427	401	463	466	18.3
TMCC	2,195	2,481	2,522	2,296	2,387	2,566	17.0
WNCC	858	920	956	999	1,007	1,125	31.0
Community Colleges Sub-Total	6,776	7,683	7,418	7,166	7,407	7,849	15.8
SYSTEM TOTAL	20,543	22,156	21,803	21,331	21,856	22,781	10.9

*Figures may not total due to rounding.
[1]Data reported from Registrars' First Reports.
[2]Data reported as of 10/15.
IR 11/86

FIGURE 3



Source: WICHE Teachers Insurance and Annuity Association and the College Board, Jan. 1984.

FIGURE 4

UNIVERSITY OF NEVADA SYSTEM
Total Degrees & Certificates Conferred
July 1980 to June 1986

Institution	Certificates	Associates	Bachelors	Masters	Doctorates	Professional	Total
Universities							
UNR							
1980-81	—	19	817	181	17	48	1,082
1981-82	—	41	779	216	24	45	1,105
1982-83	—	48	835	189	19	42	1,133
1983-84	—	38	904	194	25	48	1,209
1984-85	—	40	953	180	26	46	1,245
1985-86	—	20	917	218	21	49	1,225
UNLV							
1980-81	—	91	564	250	5	—	910
1981-82	—	93	733	253	10	—	1,089
1982-83	—	91	855	242	7	—	1,195
1983-84	—	108	940	251	4	—	1,303
1984-85	—	98	899	234	5	—	1,236
1985-86	—	89	921	203	7	—	1,220
Community Colleges							
CCCC							
1980-81	19	290	—	—	—	—	309
1981-82	5	337	—	—	—	—	342
1982-83	58	432	—	—	—	—	490
1983-84	54	478	—	—	—	—	532
1984-85	49	404	—	—	—	—	453
1985-86	53	408	—	—	—	—	461
NNCC							
1980-81	0	64	—	—	—	—	64
1981-82	29	31	—	—	—	—	60
1982-83	18	39	—	—	—	—	57
1983-84	19	40	—	—	—	—	59
1984-85	22	40	—	—	—	—	62
1985-86	24	36	—	—	—	—	60
TMCC							
1980-81	18	165	—	—	—	—	183
1981-82	15	186	—	—	—	—	201
1982-83	28	195	—	—	—	—	223
1983-84	24	294	—	—	—	—	318
1984-85	38	235	—	—	—	—	273
1985-86	26	268	—	—	—	—	294
WNCC							
1980-81	16	74	—	—	—	—	90
1981-82	42	82	—	—	—	—	124
1982-83	156	106	—	—	—	—	262
1983-84	8	122	—	—	—	—	130
1984-85	15	104	—	—	—	—	119
1985-86	15	115	—	—	—	—	130
System							
1980-81	53	703	1,381	431	22	48	2,638
1981-82	91	770	1,512	469	34	45	2,921
1982-83	260	911	1,690	431	26	42	3,360
1983-84	105	1,080	1,844	445	29	48	3,551
1984-85	124	921	1,852	414	31	46	3,388
1985-86	118	936	1,838	421	28	49	3,390

Source: Higher Education General Information Survey, "Degrees and Other Formal Awards Conferred," 1981-86.

IR 11/86

FIGURE 5

Estimated Average Annual Growth
University of Nevada System
1987 - 1991

UNR	
Undergraduate	
HC	1.05%
FTE	1.30
Graduate	
HC	0.72
FTE	1.04
UNLV	
Undergraduate	
HC	5.5
FTE	4.4
Graduate	
HC	6.0
FTE	4.5
CCCC	
HC	7.0
FTE	3.0
NNCC	
HC	2.29
FTE	2.29
TMCC	
HC	4.3
FTE	4.8
WNCC	
HC	4.15
FTE	4.15

FIGURE 6

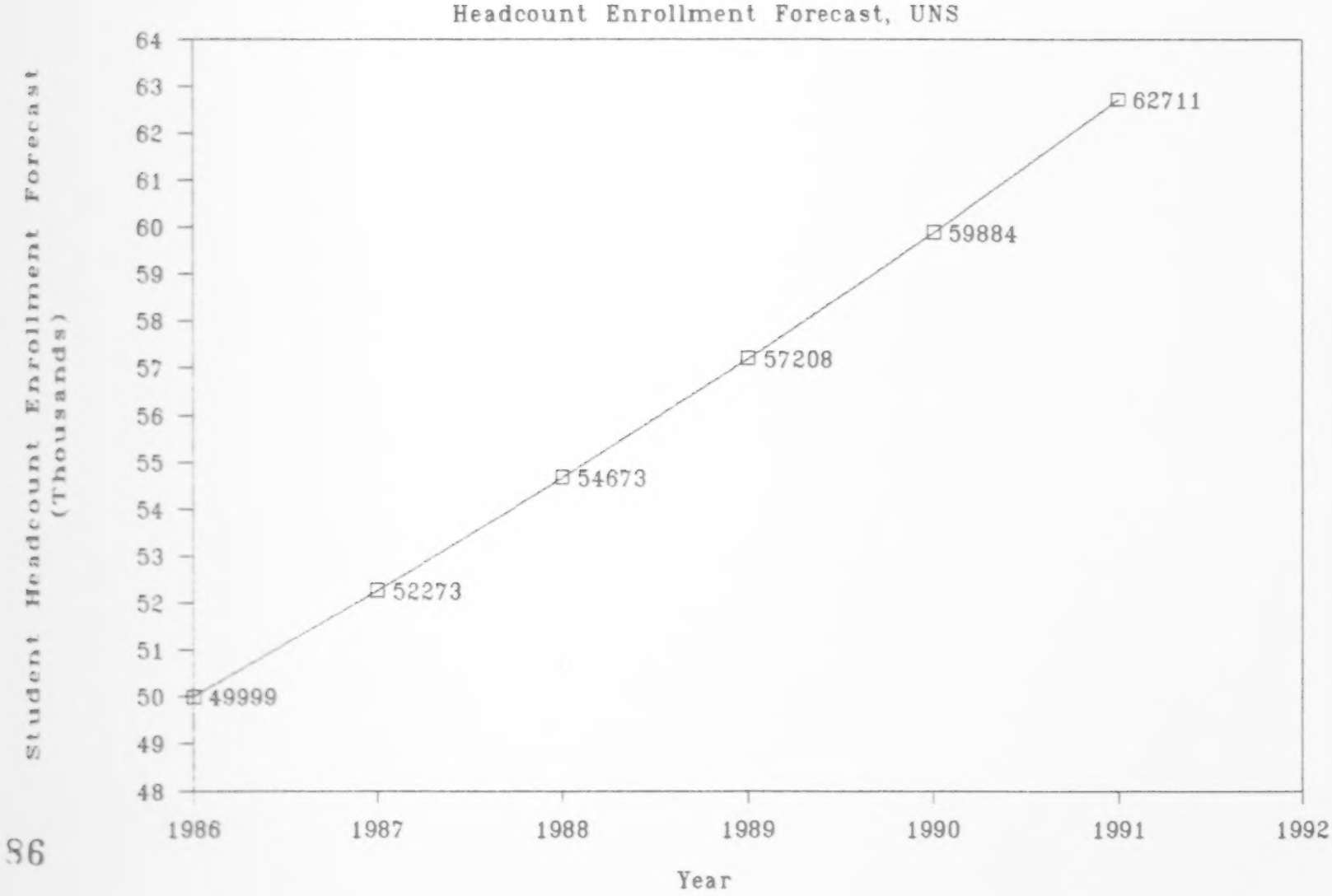
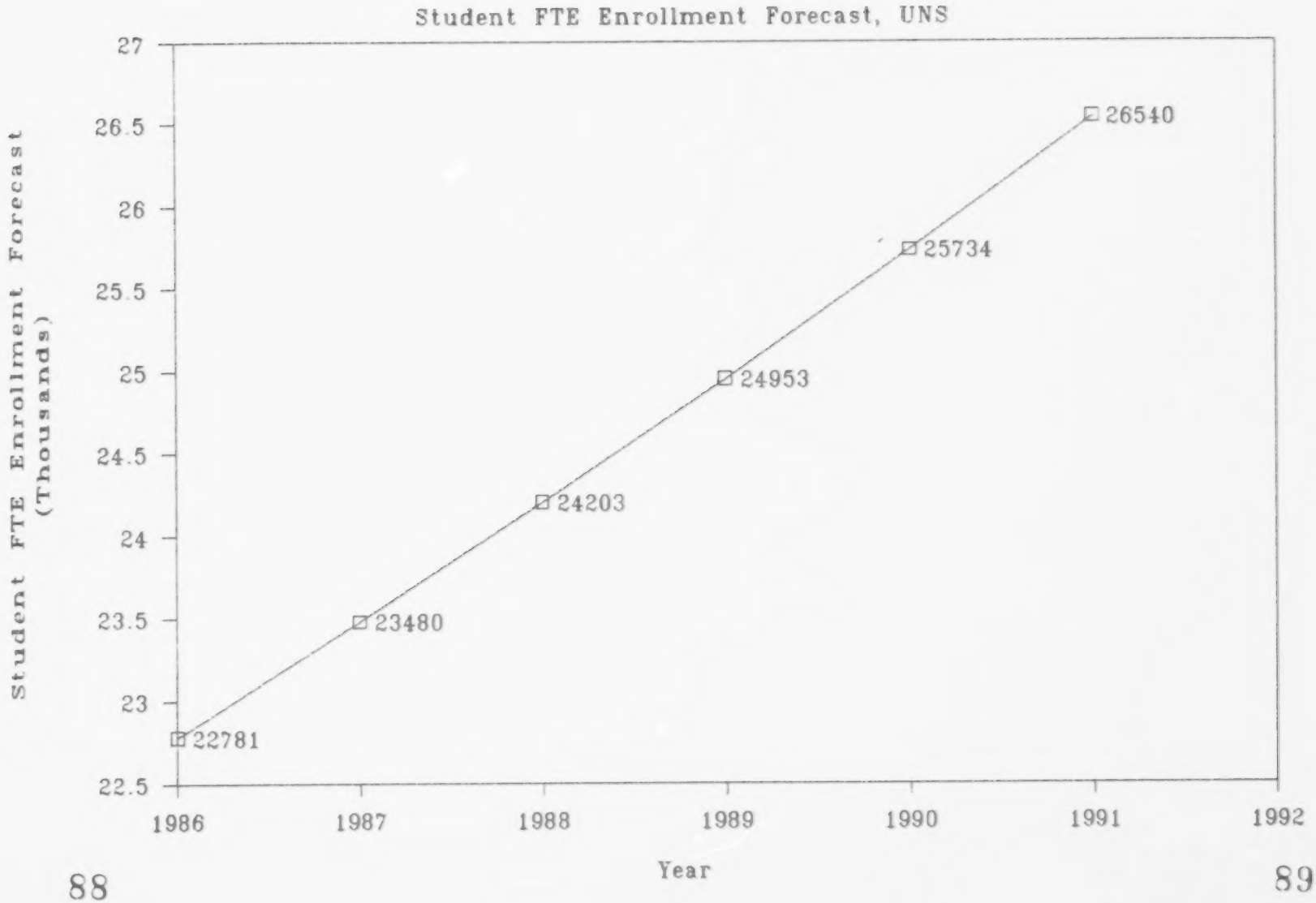

Headcount Enrollment Forecast, UNS
Student Headcount Enrollment Forecast (Thousands)
64
63
62
61
60
59
58
57
56
55
54
53
52
51
50
49
48
49999
52273
54673
57208
59884
62711
1986
1987
1988
1989
1990
1991
1992
Year

FIGURE 7


Student FTE Enrollment Forecast, UNS
Student FTE Enrollment Forecast (Thousands)
27
26.5
26
25.5
25
24.5
24
23.5
23
22.5
22781
23480
24203
24953
25734
26540
1986
1987
1988
1989
1990
1991
1992
Year

Degrees Offered

The appendix of this report contains an easily referenced list of all degrees (by type, level, and campus) offered within the University of Nevada System. This provides a comprehensive look at all academic program offerings in public higher education in Nevada.

University of Nevada

Programs by Major	UNIVERSITIES UNR	UNLV	COMMUNITY COLLEGES CCCC	NNCC	TMCC	WNCC
AGRICULTURE						
Agricultural Business				A		
Agricultural Economics	B,M					
Agricultural Education	B					
Animal Science	B,M			A		
Farm and Ranch Management				A		
Integrated Pest Management	M					
Ornamental Horticulture			A			
Plant Science	B,M					
Resource Management	B,M			A		
Veterinary Science	B					
BUSINESS						
Accounting	B	B,M	A	C	C,A	C,A
Accounting Technician				C		
Administrative Secretarial					C,A	
Banking and Finance			C,A			C,A
Bookkeeping			C			
Business Administration	M	M		C,A		
Business Education	B					
Business Management			A			
Casino Management			C,A			
Clerical					C,A	C,A
Economics	B,M	B,M				
Finance	B	B				
General Business					C,A	C,A
Hospitality Science					C,A	
Hotel Administration		B,M				
Hotel Technology			C,A			
Legal Secretary					C,A	
Management	B	B				C,A
Management Information Systems		B				
Marketing	B	B			C,A	C,A
Marketing/Merchandising/Retail/ Management			C,A			
Medical Secretary					C,A	
Mid-Management					C,A	
Money and Banking					C,A	
Office Administration			A	A	C,A	C,A
Office Administration/ Records Management			A,C			
Real Estate			A		C,A	C,A
Savings and Loan			A			
Secretarial					C,A	
Secretarial and Clerical				C		C,A
Small Business Management					C,A	C,A
Stenographic Secretarial						A
Word Processing			A	C	C,A	C,A
COMMUNICATIONS						
Communication Studies		B,M				
Communications			A			
Journalism	B,M					
Speech Communication	B,M					
Theatre	B					
COMPUTER AND INFORMATION SCIENCES						
Computer Information Systems	B					
Computer Science	B,M	B	A			
Computing and Information Technology			A,C			
Data Processing			C	C	C,A	C,A
Micro-Computer					C,A	
EDUCATION						
Athletic Training		B				

Programs by Major	UNIVERSITIES UNR	UNLV	COMMUNITY COLLEGES CCCC	NNCC	TMCC	WNCC
Child Development (Infant Toddler)			C,A			
Child Development (Pre-School Education)			C,A	C,A		
Child Development (Teacher Aide)			C			
Child Development (Teacher)					C	
Child Development (Director)					C	
Counseling and Educational Psychology and Foundations		M,D				
Counseling & Guidance Personnel Services	M,S,D					
Curriculum and Instruction	S	M,S,D				
Early Childhood Education				A,C		
Educational Administration and Higher Education	M,S,D	M,S,D				
Elementary Education	B,M	B				
Health Education		B				
Health, Physical Education & Recreation		M				
Industrial Education	B					
Kindergarten Primary	B					
Music Education	B					
Physical Education	B,M	B				
Physical Sciences	B					
Professional Development		PDD				
Recreation	B	B				
Secondary Education	B,M	B				
Secondary, Postsecondary and Vocational Education		M,S,D				
Social Studies	B					
Special Education	B,M	B,M S,D				
ENGINEERING						
Architecture		B				
Architectural Design					A	
Architectural Drafting					C	
Architectural Landscape Design					A	
Automotive Technology Program			C,A	C,A	C,A	
Chemical Engineering	B					
Civil Engineering	B,M	B				
Civil and Mechanical Engineering		M				
Computer Integrated Manufacturing Systems Engineering	M					
Computer Science Engineering		B				
Computer Science and Electrical Engineering		M				
Drafting Technology Program			C,A	C	A	
Engineering	D					
Electrical Engineering	B,M	B				
Electronic Engineering Technology			C,A			
Electronics Service Technology			C,A			
Electronics Technology					C,A	A
Engineering Physics	B					
Geological Engineering	B,M,P					
Manufacturing Technology						A
Mechanical Engineering	B,M	B				
Metallurgical Engineering	B,M,P					
Mining Engineering	B,M,P					
Mining Technology				C,A		
Professional Development		PDD				
Residential Design					A	
Solar Energy Technology					C,A	
Welding Technology			C	C	C,A	C,A
FOREIGN LANGUAGES						
Foreign Languages		M				
Foreign Languages & Literatures	M					
French	B	B				
German	B	B				

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System Degrees Offered by Level, Fielc

Programs by Major	UNIVERSITIES UNR	UNLV	COMMUNITY COLLEGES CCCC	NNCC	TMCC	WNCC
Romance Languages		B				
Spanish	B	B				
HEALTH						
Clinical Laboratory Science	B					
Dental Assisting					C,A	
Dental Hygiene			A			
Emergency Medical Technology						C
Health Education	B	B				
Licensed Practical Nurse			C	C	C	C
Medical Laboratory Technical			A			
Medical Sciences	B					
Medicine	D					
Nursing	B,M	A,B,M		A	A	A
Nursing Assistant						C
Paramedic Medicine			A			
Pre-Dental	B					
Pre-Medical	B					
Pre-Pharmacy	B					
Pre-Physical Therapy	B					
Radiologic Technology		A,B			A	
Respiratory Therapy			A,C			
Speech Pathology	B					
Speech Pathology & Audiology		M				
HOME ECONOMICS						
Child and Family Studies	B					
Consumer Sciences	B					
Culinary Arts					C,A	
Fashion Merchandising	B					
Food and Nutrition	B					
Food Service Technology			C,A			
Home Economics	M					
Housing and Interior Design	B					
LAW						
Court Reporting			A			
Legal Assistant			C,A			
Prelegal	B					
LETTERS						
English	B,M,D	B,M	A			
Teaching of English	M					
LIBERAL/GENERAL STUDIES						
Arts			A	A	A	A
General Studies	B		A	A	A	A
General Transfer			A			
Liberal Studies		B				
LIFE SCIENCES						
Biochemistry	M,D					
Biology	B,M,D					
Biological Science	B	B,M				
Botany	B,M					
Cellular and Molecular Biology	M,D					
Zoology	B,M					
MATHEMATICS						
Mathematics	B,M					
Mathematical Science		B,M				
Teaching Of Mathmatics	M					
MULTI/INTERDISCIPLINARY STUDIES						
Basque Studies	D					
Interdisciplinary Studies		B				

Programs by Major	UNIVERSITIES UNR	UNLV	COMMUNITY COLLEGES CCCC	NNCC	TMCC	WNCC
Land Use Planning	M					
PERSONAL AND SOCIAL DEVELOPMENT						
Health, Physical Education, & Recreation			A			
Physical Education Emphasis			A			
Recreation	B		A			
Recreation Emphasis			A			
PHILOSOPHY, RELIGION & THEOLOGY						
Philosophy	B	B				
PHYSICAL SCIENCES						
Applied Physics		B				
Atmospheric Physics	M					
Chemistry	B,M,D	B,M				
Earth Sciences		B				
Geochemistry	M,D					
Geography	B					
Geology	B,M	B				
Geology & Related Earth Sciences	D					
Geophysics	B,M,D					
Geosciences		M				
Geotechnical Science				A		
Hydrology and Hydrogeology	M,D					
Physics	B,M,D	B,M				
Science			A			
Science and Education		PDD				
Water Resources Management		M				
PSYCHOLOGY						
Psychology	B,M,D	B,M				
PUBLIC AFFAIRS & PROTECTIVE SERVICES						
Administration of Justice				A		
Corrections						C,A
Criminal Justice	B	B	A	A	C	
Fire Science Technology			C,A		C,A	
Fire Science Management			C,A			
Industrial Security					A	
Juvenile Court Judges	M					
Juvenile Justice					A	A
Law Enforcement					A	C,A
Private Security					A	
Public Administration	C	B,M				
Public Administration & Policy	M					
Social Work	B	B				
Trial Judges	M					
SOCIAL SCIENCES						
Anthropology	B,M	B,M				
History	B,M,D	B,M				
International Affairs	B					
Political Science	B,M	B,M				
Social Psychology	B,D					
Social Sciences		B	A			
Social Work	B	B				
Sociology	B,M	B,M				
TRADE AND INDUSTRIAL						
Auto Body Service					A	
Automotive Mechanics				C,A	C,A	C,A
Building Trades					C,A	
Diesel Mechanics				C,A	A	
Mechanical Drafting					C,A	

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d, and Campus

UNIVERSITIES COMMUNITY COLLEGES

Programs by Major	UNR	UNLV	CCCC	NNCC	TMCC	WNCC
Refrigeration & Air Cond. Service					C	
VISUAL & PERFORMING ARTS						
Art	B	B_A				
Dance		B				
Graphic Arts			C,A			
Fine Arts			A			
Music	B,M	B,M				
Music Applied	B					
Theatre Arts		B				

KEY: Degree Offered

C — Certificate of Achievement (all levels)
A — Associate (A.A., A.S., A.A.S.)
B — Baccalaureate (B.A., B.S., B.S.B.A., B.F.A., B.S.C.E., B.S.E.E., B.S.E.S., B.S.H.A.)
M — Master's (M.A., M.S., M.B.A., M.P.A., M.Ed., M.M., M.A.T.E., M.S.V.C., M.S.C.E., M.S.E.E.)
S — Specialist (1 year beyond Master's)
D — Doctorate (Ph.D., Ed.D.)
P — Professional (Geol.E., Met.E., E.M.)
PDD — Professional Development Degree

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INDEX OF DEGREES OFFERED: UNIVERSITY OF NEVADA SYSTEM

The following index contains a listing of all degrees presently offered by the campuses of the University of Nevada System, classified by level of degree, academic field, and campus.

- University of Nevada, Las Vegas
- University of Nevada-Reno
- Clark County Community College
- Northern Nevada Community College
- Truckee Meadows Community College
- Western Nevada Community College

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